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PROCEEDINGS

OF THE

AMERICAN ORIENTAL SOCIETY,

AT ITS

MEETING IN BOSTON AND CAMBRIDGE, MASS.,

April 6th, 7th, and 8th, 1893.

THE Society assembled at Cambridge, in the Room of the Faculty of Arts and Sciences of Harvard University, University Hall, on Thursday, April 6th, and was called to order by the President, Rev. Dr. William Hayes Ward, at 3.15 P. M.

The following members were in attendance at the sessions :

Babbitt	Ferguson	Jenks	Moore, G. F.	Thayer
Berle	Frame	Kellner	More	Torrey
Bierwirth	Gilman	Lanman	Mullan	Ward, W. H.
Channing, Miss	Goodwin, C. J.	Lindsay	Oertel	Warren, H. C.
Chester	Harper, W. R.	Lyon	Orne	Warren, W. F.
Clark, Miss	Haupt	Martin	Reisner	Winslow
Dahl	Hazard	Macdonald	Ropes	Wright, T. F.
Dike	Higginson	Mitchell	Steele	Young
Elwell	Jackson	Moore, C. H.	Taylor, J. R.	[44]

The minutes of the Washington meeting were read by the Recording Secretary, Prof. Lyon, of Harvard University, and accepted by the Society. The report of the Committee of Arrangements was submitted in the form of a printed program and accepted.

The Chair appointed as a Committee to audit the Treasurer's report Rev. Mr. Berle and Prof. Kellner ; and, as a Committee to prepare a list of nominations for office for the ensuing year, Prof. J. Henry Thayer, Prof. George F. Moore, and Prof. Elwell.

The reports of the retiring officers were now in order.

The Treasurer, Mr. Henry C. Warren, of Cambridge, Mass., presented his accounts and statement to the Society ; and they

were referred, with book and vouchers and the evidences of the property, to the above named Committee of Audit. The Committee reported that the accounts were in due order, and that the funds called for by the balances were in the possession of the Treasurer. The usual analytical summary of the General Account follows :

RECEIPTS.

Balance from old account, April 21, 1892.....	\$432.84
Assessments (155) paid in for 1892-93.....	\$775.00
Assessments (38) for other years	190.00
Sales of publications.....	183.30
Interest on Publication Fund.....	101.17
Interest on balances of General Account.....	14.96
	<hr/>
Total income of the year.....	1,264.43
	<hr/>
Total receipts for the year.....	\$1,697.27

EXPENDITURES.

Journal, xv. 2 (remainder), and distribution.....	\$231.68
Proceedings, April, 1892.....	326.19
Authors' extras from Journal and Proceedings.....	36.00
Job printing	16.00
Postage, express, brokerage, etc.....	41.44
	<hr/>
Total disbursements for the year.....	\$651.31
Credit balance on Gen'l Account, April 6, 1893.....	1,045.96
	<hr/>
	\$1,697.27

One life-membership fee has also been received during the year, and is, in accordance with action taken last year, retained as capital. The anonymous gift of \$1,000 to the Publication Fund reported last year has been invested in eight shares of the State National Bank, Boston (bought at 126 ; the extra \$8 is included in the item of "brokerage" in the above account), and is earning at present a trifle over 6 per cent.

The state of the funds is as follows :

1892, Jan. 1, Amount of the Bradley Type-fund.....	\$1,316.70
Interest one year	53.18
	<hr/>
1893, Jan. 1, Amount of the Bradley Type-fund.....	\$1,369.88
Amount of Publication-fund	2,008.00
1892, July 7, Amount of Life-membership-fund	75.00
Interest to Oct. 12, 1892.....	.75
	<hr/>
1892, Oct. 12, Amount of Life-membership-fund.....	\$75.75
1893, April 6, Balance of General Account.....	\$1,045.96

The bills for Journal xv. 3 have not yet been presented.

The report of the Librarian, Mr. Van Name, for the year 1892-3, is as follows: The accessions to the Society's library for the past year have been 37 volumes, 78 parts of volumes, 99 pamphlets, and 9 manuscripts (Sanskrit). The titles of all these works are included in the list appended to volume xv. of the Journal, just completed. The number of titles of printed works now in the library is 4,595; of manuscripts, 186.

The Committee of Publication reported that since the last meeting they had published and distributed the following: Journal, volume xv., number 2 (= pages 143-283), issued June 22, 1892; Proceedings of the Washington meeting of April 21-23, 1892 (= vol. xv., pages cxli-cxxx), issued Nov. 28, 1892; and finally, Journal, vol. xv., number 3 (= pages 283-322 and ccxxi-cxxlvii and i-v), issued April 3, 1893; in all, 292 pages.

Professor Lanman observed that a plan to publish the Journal as a quarterly had been strenuously advocated by one or two members. He believed that the Committee of Publication were very strongly of the opinion that promptness and frequency of issue were in the highest degree desirable; but that, on the other hand (aside from the consideration of expense), the quality of the material offered for publication should be the sole determinant of the question whether any given paper should be printed; that the needlessly created necessity of issuing a number upon each quarter-day might make quantity a co-determinant, a result for which parallels are not far to seek, and which would be most sincerely to be deprecated.

Moreover, there are indications—all of the greatest hope and promise—that material of the most worthy character is already forthcoming with increasing abundance, and that the laboriously gathered items of the Society's income are likely to allow of a somewhat extended scale of expenditure for printing.

Finally, it was noted that the German Oriental Society is only a little younger than our own; that it has between four and five hundred contributors to its treasury, or about twice as many as have we; that—what is much more to the point—the professed Orientalists among its members are far more numerous than ours, and that this disparity, through most of the past history of our Society, has been much greater than it is even now; and that, as compared with their splendid achievements—Journal, "Abhandlungen," and miscellaneous works, some seventy-five volumes in all—our fifteen volumes of Journal and Proceedings is a showing by no means discreditable.

The Directors reported by their Scribe, Prof. Lanman, as follows:

1. They had appointed the next regular business meeting of the Society to be held on the Thursday, Friday, and Saturday of next Easter week, March 29, 30, and 31, 1894, or on some one or more of those three days, and that they would determine and announce the place of meeting in due course.

2. They had re-appointed, as Committee of Publication for 1893-94, Messrs. Hall, Lanman, G. F. Moore, Peters, and W. D. Whitney.

3. On recommendation of the Librarian they had voted a standing annual appropriation of \$25 for the binding of books.

4. They had voted to present the report of the Committee on Joint Meetings to the Society, with a recommendation that the resolutions proposed by that report be adopted. (See below.)

5. They had voted to recommend to the Society for election to membership the following persons:

As Corporate Members:

Rev. J. L. Amerman, New York, N. Y.;
Mr. Nageeb J. Arbeely, New York, N. Y.;
Mr. Joseph F. Berg, New Brunswick, N. J.;
Dr. Heinrich C. Bierwirth, Cambridge, Mass.;
Dr. I. M. Casanowicz, Washington, D. C.;
Dr. Charles H. S. Davis, Meriden, Conn.;
Mr. Wm. W. Hastings, Haverford, Penn.;
Rev. Willis Hatfield Hazard, Cambridge, Mass.;
Rev. Arthur Lloyd, Port Hope, Ontario;
Mr. Percival Lowell, Boston, Mass.;
Prof. Duncan Macdonald, Hartford, Conn.;
Mr. George L. Meyers, New York, N. Y.;
Prof. Clifford H. Moore, Andover, Mass.;
Mr. Paul Elmer More, St. Louis, Mo.;
Mr. Murray Anthony Potter, San Francisco, Cal.;
Mr. James Hardy Ropes, Andover, Mass.;
Mr. William A. Rosenzweig, New York, N. Y.;
Rev. W. Scott Watson, Jr., Guttenberg, N. J.;
Prof. Theodore F. Wright, Cambridge, Mass.

As Corresponding Members:

Mr. George A. Grierson, Bengal Civil Service, Howrah, Bengal;
Dr. A. F. Rudolf Hoernle, Madrassah, Calcutta, Bengal;
Rev. W. A. Shedd, Missionary at Oroomiah, Persia;
Dr. John C. Sundberg, U. S. Consul at Baghdad, Turkey.

And as Honorary Members:

Prof. Edward B. Cowell, Cambridge, England;
Prof. Friedrich Delitzsch, Leipzig, Germany;
Prof. Ignazio Guidi, Rome, Italy;
Prof. Hendrik Kern, Leyden, Netherlands;
Prof. Jules Oppert, Paris, France;
Dr. Reinhold Rost, London, England;
Prof. Archibald H. Sayce, Oxford, England.

The report of the Directors being thus finished, the Society proceeded to the election of new members; and, ballot being had, the above named gentlemen were duly elected.

Mr. Talcott Williams, Chairman of the Committee appointed to confer with several Societies for the purpose of agreeing upon a common time and place of meeting, presented a written report embodying the following resolutions:

Resolved, That the Directors of this Society be requested to make arrangements with any of the following Societies, to wit :

The American Philological Association ;
The Archæological Institute of America ;
The Anthropological Society of Washington ;
The Society of Biblical Literature and Exegesis ;
The Modern Language Association of America ;
The American Folklore Society ;
The American Dialect Society—

or any other Societies of a similar purpose, for a joint meeting in connection with the next annual meeting of this Society.

Resolved, That the Directors have authority* to appoint a meeting of this Society either in the Christmas vacation of 1893-94, the Easter vacation of 1894, or the Christmas vacation of 1894-5, if an alteration from the usual date be necessary in order to secure a joint meeting.

The resolutions were adopted, and the Committee, Messrs. Williams, Haupt, and Lanman, continued over for another year.

The following names of recently deceased members of the Society were reported:

Dr. Thomas Chase, of Providence, R. I.;
Brinton Coxe, Esq., of Philadelphia, Penn.;
Mr. George E. Eby, of Philadelphia, Penn.;
Dr. Andrew P. Peabody, of Cambridge, Mass.

On Friday morning, Professors Elwell, G. F. Moore, and Thayer, as the Committee on the nomination of Officers, reported. Dr. Ward having intimated his desire not to stand for re-election, on account of the pressure of his other duties, which made it impracticable for him to give to the position such time and care as he felt that it demanded, the Committee nominated as President of the Society, Pres. D. C. Gilman; as Vice-President, in Mr. Gilman's place, Dr. Ward; and as Vice-President, in place of the late Dr. Peabody, Prof. Toy; and for the remaining offices, the incumbents of the preceding year. The gentlemen so nominated were elected. The Board for 1893-94 is accordingly as follows:

* In accordance with the palpable intention of this resolution, it should read "Directors be requested to appoint," etc.

President—Pres. D. C. Gilman, of Baltimore.

Vice-Presidents—Dr. William Hayes Ward, of New York ; Prof. C. H. Toy, of Cambridge ; Prof. Isaac H. Hall, of New York.

Corresponding Secretary—Prof. C. R. Lanman, of Cambridge.

Recording Secretary—Prof. D. G. Lyon, of Cambridge.

Treasurer—Mr. Henry C. Warren, of Cambridge.

Librarian—Mr. Addison Van Name, of New Haven.

Directors—The officers above named ; and, Professors Bloomfield and Haupt, of Baltimore ; Mr. Talcott Williams, of Philadelphia ; Prof. E. W. Hopkins, of Bryn Mawr ; Prof. A. L. Frothingham, of Princeton ; Prof. R. Gottheil, of New York ; Prof. George F. Moore, of Andover.

The session of Thursday afternoon was held at the Room of the Faculty of Arts and Sciences of Harvard University. Soon after assembling, the Society took a brief recess, while tea was served in the office of the Dean of Harvard College. Upon adjournment, some of the members went to the house of Prof. Toy and others to the house of Prof. Lanman, for supper and an informal evening gathering.

The session of Friday morning was held in the house of the Treasurer, Mr. Warren. This is the same house in which the Society used to assemble in the days of Professor Beck, who formerly lived in it. At the close of the morning session, upon the invitation of Mr. Warren, the members of the Society took their luncheon at his house.

The session of Friday afternoon (April 7) was held in the Library of the American Academy, in Boston. This meeting was on the precise fiftieth anniversary of the first meeting of the incorporated Society, which was called to meet at the house of Mr. John J. Dixwell, No. 5 Allston street, Boston, at three o'clock, Friday afternoon, April 7, 1843. The anniversary meeting was devoted to reminiscences of the founders and of the history of the Society, contributed by Dr. Ward, Prof. Lanman, Prof. Thayer, Rev. Henry L. Jenks, Prof. G. F. Moore, and Prof. Lyon.

Twenty-one members of the Society dined and spent the evening together at the Parker House.

Saturday morning's session was held in Claflin Hall of Boston University, Somerset street, Pres. W. F. Warren of Boston University acting as Chairman. During the session, Col. T. W. Higginson gave some very interesting reminiscences of Theodore Parker and Charles Beck. On motion, there were passed votes of thanks to Harvard University, the American Academy, and Boston University, as also to Messrs. Lanman, Toy, and Warren, for the various kind offices which had contributed to make the meeting a pleasant and successful one. At the close of the final session, twenty-six persons were present, all being members of the Society. The Society adjourned at quarter before one o'clock.

The following communications were presented:

1. On a new critical edition of the Hebrew text of the Old Testament;* by Professor Paul Haupt, of Johns Hopkins University, Baltimore, Md.

The first part of the new edition of *The Sacred Books of the Old Testament* contains the Hebrew text of the Book of Job, with notes by Professor Siegfried of the University of Jena. The Hebrew text fills 27 pages, and the *Critical Notes* 21. With the exception of the portions written in prose, namely the prologue (chapters 1-2) and the epilogue (42. 7-17), as well as the introductory verses prefixed to the discourses of Elihu (c. 32. 1-6), the text is printed *σπληνδόν*, in double columns. The composite structure of the Book of Job is illustrated by the use of three different colors. The original portions of the poem are printed in black without any additional coloring, while subsequent additions are placed in blocks of different colors, namely blue, red, or green: blue indicating parallel compositions; red, corrective interpolations conforming the speeches of Job to the spirit of the orthodox doctrine of retribution; and green indicating polemical interpolations directed against the tendency of the poem. The Elihu speeches (chapters 32-37) are given in a special appendix printed in green. Later interpolations and glosses are relegated from the text and appear in the foot-notes.

The traditional order has often been changed to restore the proper sequence. After c. 13. 1-27 there follows for instance c. 14. 4, 3, 6, 13, 15, 16, 17, 1, 2; 13. 28; 14. 5, 7-12, 14, 18-22, etc. In order to facilitate references to verses appearing out of the traditional order, there has been appended a *Concordance*, giving the received arrangement of the verses and the corresponding pages and verses of the new edition. For the sake of clearness, the whole text has been divided into paragraphs wherever the change of subject seemed to require it.

The emendations adopted (ca. 600) are not given in the notes, as in Graetz's† posthumous work, but appear in the text. They are all carefully indicated by special diacritical marks, showing in every case where the *Qêrê* has been adopted instead of the *Kêthîb*; whether the new reading involves merely a departure from the Masoretic points or a different division of the consonantal text, whether it is conjectural or based on the authority of the ancient Versions. Doubtful words are marked with notes of interrogation, *lacunæ* are indicated by * * * *, and hopelessly corrupt passages by . . . : the received text in such

* *The Sacred Books of the Old Testament.* A critical edition of the Hebrew text, printed in colors, with notes, by eminent Biblical scholars of Europe and America, edited by Paul Haupt. Part 17: *The Book of Job.* By C. Siegfried. Leipzig: J. C. Hinrichs'sche Buchhandlung; Baltimore: The Johns Hopkins Press, 1893.

† *Emendationes in plerosque Sacræ Scripturæ Veteris Testamenti libros secundum veterum versiones nec non auxiliis criticis cæteris adhibitis.* Auctore H. Graetz. Ex relicto defuncti auctoris manuscripto ed. Guil. Bacher. Breslau, 1892. New York: Gustav E. Stechert.

cases being given in the notes appended. The Hebrew text has been left unpointed except in ambiguous cases.

The *Notes* contain brief philological justifications of the emendations adopted, with constant references to the ancient Versions as well as to modern critics. Above all, Merx's well-known book* is cited throughout the *Notes*. It has not been deemed necessary to classify all the divergences exhibited by the ancient Versions. As a rule, there have been recorded only those variations on the authority of which an emendation has been adopted by the editor of the book. The Hebrew text is cited in the *Notes* according to the pages and lines of the new edition. But it is proposed to add in the subsequent parts, in the outer margin, the number of the chapters and verses, in order to facilitate references as much as possible. The English translation of the *Notes* has been most carefully prepared by Professor R. E. Brünnow, of the University of Heidelberg.

The chief aim of the new edition of the Hebrew text is to furnish the philological foundation for our new translation of the Bible now in course of preparation. The edition of the Hebrew text exhibits the reconstructed text on the basis of which the new translation has been prepared by the contributors. At the same time, it is hoped that the edition will prove useful for the class-room. It will save the instructor much time in giving in a brief and distinct form the critical analysis of the book in question. It will moreover have a most wholesome effect on the student, in forcing him to read unpointed Hebrew,† a practice which, unfortunately, is too much neglected in most of our Universities and Theological Seminaries. But, above all, I hope our new edition will become an indispensable help for all Hebraists who study the Old Testament from a critical point of view. It will show the student at a glance whether the received text is unquestionably correct, whether a passage is original or a subsequent addition. Thus it will, I think, place not only the historical but also the grammatical and lexicographical study of the Old Testament on a new basis.‡ A good deal of space is taken up in our Hebrew grammars and dictionaries with the explanation of unusual forms and words.§ Most of these will be found eliminated in our edition.

The munificence of Jacob H. Schiff, Esq., of New York, to whom Harvard University is indebted for the new Semitic museum, has enabled us to place the new edition within the reach of all students. Though the work is perhaps the most sumptuously gotten up Hebrew book ever published, the parts will be sold, in handsome covers, at the nominal price of about \$1.00. Bibliophiles will be glad to learn that

* *Das Gedicht von Hiob*. Hebräischer Text, kritisch bearbeitet und übersetzt, nebst sachlicher und kritischer Einleitung, von Adalbert Merx. Jena, 1871.

† We must remember that a pointed Semitic text prejudices the reader. The adding of the vowels is a semi-interpretation.

‡ Cf. the remarks of Paul de Lagarde prefixed to the second part of his *Orientalia*, Göttingen, 1880.

§ Cf. Stade's *Lehrbuch der hebr. Grammatik* (Leipzig, 1879), p. vi.

there will be an *édition de luxe*, limited to 100 copies, printed on the most costly hand-made Dutch paper, in a beautiful ornamental binding specially designed for the work by Professor Stroehl, of Vienna, who also has designed the new ornamental headings and tail-pieces for the Hebrew text.

In conclusion, I should like to say a few words about an objection that will most likely be raised against our new edition. Some people will say, I presume, that the critical analysis is more or less subjective, that there is not a general consensus of opinion concerning the departures from the received text, even among the most competent Biblical scholars; perhaps none save the editor of the book in question will believe in his reconstruction of the text. Now it is undoubtedly true that in a great many cases we cannot as yet give the final dictum of science. Like all progressive research, Biblical criticism is in a state of fluctuation. A student who uses our new edition must rely on his own judgment. We cannot expect to find the final solution of all difficulties at once. We must be satisfied to recognize the difficulties as such, to realize that the received text and the traditional order is not intact. If we do not always hit the mark in reconstructing the text, we may find some comfort in the maxim, which I at least adhere to, that the probably right is preferable to the undoubtedly wrong. Ultra-conservatism bars all progress. A man who is afraid of making a mistake had better not write on the Bible*—or, for that matter, on any scientific subject at all. Nor do I think that honest work can do any harm to the cause of religion. It is a pity to think that faith and reason should be incompatible. Reason is a divine gift. Let us exercise it, but (as I stated in the first programme of our work)† with the *verecundia* due to the venerable documents which form the basis of our faith.

2. On a modern reproduction of the eleventh tablet of the Babylonian Nimrod Epic and a new fragment of the Chaldean account of the Deluge; by Professor Haupt.

The Johns Hopkins Press has now on sale a few plaster casts of a modern reproduction of the Chaldean Flood Tablet, *i. e.* the eleventh tablet of the so-called Izdubar or Gilgamesh‡ Legends, commonly known under the name of the Babylonian Nimrod Epic. The casts have been most carefully made by one of the modelers of the U. S.

* Cf. the conclusion of B. Duhm's preface to his commentary on Isaiah (Göttingen, 1892), p. iv.

† See Johns Hopkins University Circulars, No. 98 (May, 1892), p. 89, § 15.

‡ For the name *Gilgameš* = Γίλαμος (Ael. n. an. xii. 21), cf. Dr. Casanowicz's note in No. 98 of the Johns Hopkins University Circulars, p. 91. Mark Lidzbarski (ZA. vii. 110: cf. *ibid.* 327) suggests that the name of Nimrod's ancestor Ξισονθρος *i. e.* *Xasisatra* or *Atraxis*, may be identical with the Arabic **خضر**, who lives at the confluence of the two great rivers (**مجمع البكرين**): cf. Koran, Sura 18, v. 59 ff.). For the name *Atraxis* see *Beiträge zur Assyriologie*, ii. 401.

National Museum, Washington, D. C., from a clay tablet which I caused to be prepared some months ago by Rev. Dr. Rudolf Zehnpfund, of Rossau, near Dessau, Germany. The plaster has been colored throughout so as to give the casts the appearance of real baked cuneiform clay tablets. The color is about the same as in the two fragments of the first column of the Flood Tablet (R^m 2. II. 390 and 383) which I discovered in 1882,* or in the fragment of the Daily Telegraph Collection (D. T. 42), containing a different recension of the account of the Deluge.†

Our tablet has the size of the largest Deluge fragment known in the Kouyunjik collection of the British Museum as K 2252. A diagram showing the dimensions of this fragment is given on p. 132 of my edition. This fragment, which I refer to as Deluge Tablet A, has been pieced together out of about 20 small pieces. The reverse, for instance, is composed of 15 different pieces.‡ The text engraved on our modern Flood Tablet is the same as the one given on plates 134-149 of my edition. It is based on the fragments of 13 different copies§ of the Deluge Tablet now preserved in the British Museum. With the help of these duplicates the text can be almost completely restored. The only passages where we have rather extensive *lacunæ* now are in the lower part of the first column, and in the lines describing the building of the vessel in the upper part of the second column, as well as the lines describing the coming of the Flood in the lower parts of the second column; the beginnings of some lines in the fifth column, and the ends of some lines in the first paragraph of the sixth column. Unless we recover some new fragments, we shall never be able to complete the text.

I have reason to believe that there are still a number of unknown Deluge fragments in the collection of the British Museum. Mr. Theo. G. Pinches, than whom there is none more familiar with the treasures of the Assyrian collections in the British Museum, was kind enough to send me some time ago a new fragment of the Flood Tablet, which he discovered on August 12th, 1891. It bears the number 81. 2-4, 460. The collection 81. 2-4 (*i. e.* received at the British Museum April 2d, 1881) seems to have come from the same place as the tablets of the Kouyunjik collection.¶ Mr. Pinches wrote me that he had not been able to find out whether the new piece joined any of the other Deluge fragments. I am inclined to think that it belongs to No. 64 on p. 128 of my edition, *i. e.* 81. 2-4, 296; but of course, this can only be settled after an inspection of the two fragments.

* See my *Akkadische Sprache* (Berlin, 1883), p. xli.

† Cf. Schrader's *KAT* 57, n. 2; Delitzsch, *Assyr. Wörterbuch*, p. 143, n. 12.

‡ See the engraving in Geo. Smith's *Chaldean Account of Genesis* (London, 1880), p. 9 (German ed. p. 10), or Kaulen's *Assyrien und Babylonien* (Freiburg, 1891), p. 169. A new piece of the reverse, which was found a few years ago, is published on p. 124 of my edition. § Cf. plates 95-131 of my edition.

¶ Cf. C. Bezold, *Die Thontafelsammlungen des British Museum, in the Sitzungsberichte der Berliner Academie*, phil.-hist. Classe, July 5, 1888, p. 7, 51.

The new fragment, though very small (ca. $1\frac{3}{8} \times \frac{1}{4}$ in.), contains 5 variants to ll. 139–145 of my edition: viz., *lis* instead of *li-is* in *appalis* ‘I beheld,’ l. 139; the upright wedge for the preposition *a-na* at the beginning of l. 141; in l. 143, the phonetic complement *-a* is omitted after the number 2 (= *šanā*); in l. 145, we have the accusative *xašša* (character GAR) instead of *xaššu* ‘fifth.’* If 81. 2–4, 460 joins 81. 2–4, 296, the plural *kibrāti* ‘regions’ would be written defective in l. 139, just as the infinitive *kašādi* ‘arrival’ is written defective in l. 130 on 81. 2–4, 296. Lines 143 and 144, as well as ll. 145 and 146, form but one line each on the new fragment, as well as on the Deluge Tablets A and C^b (and I).†

These graphic variations are not of much consequence, but in l. 140 we read on the new fragment, instead of *ana 12 ta-a-an itelā nagū* ‘after 12 double hours† there appeared an island’ §, *ana 14 ta-a-an* etc., i. e. ‘after 14 double hours there appeared an island.’ The number 12 is only preserved on Deluge Tablet B, i. e. K 3375 (p. 109, l. 31 of my edition). This variation is not surprising; fragment I exhibits a number of peculiar readings: e. g. *ina nūrub nissāti* in l. 126, and *šabbā šaptā-šunu* instead of *katmā*; *rādu* after *šāru* in l. 129; and in l. 139 A-AB-BA = *tāmdum*|| follows immediately after *kibrāti*.

I give here a reproduction of the new fragment, based on the copy kindly sent me by Mr. Pinches.



* Cf. IV² 5, 22; *xaššu* stands for *xanšu* (IV², additions ad pl. 56, l. 5) = *xamšu*, just as *šumšu* ‘his name’ occasionally appears as *šuššu* (IV² 12, rev. 32, n. 20).

† Cf. p. 133 of my edition.

‡ See Jensen in his review of Tallquist's *Sprache der Contracte Nabun'id's*, ZA. vi. 348.

§ See Meissner, *Altbabyl. Privatrecht* (Leipzig, 1893), p. 124. Cf. the name of the Elamite city *Nagītu* (Delitzsch, *Paradies*, p. 324).

|| Deluge Tablet B has in l. 133 *appalsā-ma tāmata* ‘I beheld the sea.’ A and I, however, read TAM-MA instead of *ta-ma-ta*, and this TAM-MA cannot be explained as a masculine form of *tāmdu* (*Beitr. z. Assyrl.* i. 135). I think it should be read *ud-ma* = אֲדָמָה ‘land.’ It is possible that we should also read *udmu* instead of *ūmu* in l. 119, *udmu ullā ana tūti lū-itūr-ma*, although the frequent occurrence of *ūme ullāti* etc. (Delitzsch, AW. 449) seems to be in favor of the reading *ūmu*.

Our reproduction of the Flood Tablet is intended especially for use in academic classes, to enable students who have not access to original tablets to study the cuneiform writing. An accompanying statement gives explicit directions for the making and engraving of clay tablets, based on various experiments made by Dr. Zehnpfund, who is undoubtedly the most skilful modern cuneiform scribe. He engraved, for instance, the cuneiform congratulatory tablet which the contributors of our *Assyriologische Bibliothek* presented to the head of the firm of J. C. Hinrichs, Leipzig, at the centennial anniversary of the firm.* He also engraved the text of the legend of the demon KATER printed in the famous *menu* of the Stockholm Congress of Orientalists.† A photograph of this tablet will be published in the Transactions of the Congress.‡ A copy of the Stockholm Congress tablet is exhibited in the museum of the University of Pennsylvania, as well as in the U. S. National Museum. Some notes on the subject are published in the Report on the Section of Oriental Antiquities in the U. S. National Museum, printed in the Smithsonian Reports for 1890, p. 139.

[Postscript. A note from Mr. Pinches, just received, informs me that my conjecture regarding the new Deluge fragment is right; 81, 2-4, 460 joins 81, 2-4, 296. *Ana* 14 *ta-a-an* in l. 140 is also perfectly clear.]

3. On recent studies in Hindu grammar; by Professor W. D. Whitney, of Yale University, New Haven, Conn.

An abstract of this paper, which will appear in full elsewhere (in the *Amer. Journal of Philology*, vol. xiv.), is as follows:

In May, 1884, I read before the Society a paper entitled "On the study of Hindu grammar and the study of Sanskrit" (it was published in abstract in the Proceedings, and in full in the *Amer. Journ. Philol.*, vol. v.), intended to point out the true place and value of the grammatical division of the Sanskrit literature. Since then have appeared a number of contributions to knowledge in that department, by two younger scholars, at that time unknown, and these it is proposed to examine briefly.

The first, published in Bezzenberger's *Beiträge zur Kunde der indogermanischen Sprachen*, vols. x. and xi., 1885 and 1886, has for title "the case-system of the Hindu grammarians compared with the use of the cases in the Aitareya-Brāhmaṇa," and is a doctorate-dissertation by B. Liebich (now *privat-docent* at Breslau). Its first part was a digest of Pāṇini's rules as to the case-uses, and was very welcome, as a contribution to the easier understanding of his treatment of one important subject. In the second part, the author arranges under the Paninean scheme all the facts of case-use in the Brāhmaṇa mentioned: a careful

* Cf. Johns Hopkins University Circulars, No. 98, May, 1892, p. 92.

† *Menu du dîner offert au VIII^e Congrès International des Orientalistes*, Stockholm, le 7 Sept. 1889.

‡ I have seen the photograph, but I do not know when the Transactions of the Semitic Section I^b will be published. I understand that the first volume of the Transactions of the Stockholm Congress, containing the papers of the Islamic Section I^a, has just been issued.

and creditable piece of work. The results of the comparison are precisely what we, knowing well the relation of the Brāhmaṇa language to the classical language, should expect to find them; there is general agreement, with plenty of special differences. Nothing indicates in the slightest degree any particular relation between Pāṇini's system and this text. The general conclusion is that the native case-syntax, in spite of its striking defects of theory, is a fairly good practical scheme; the great grammarian comes out of the trial with credit. The author, however, mistakenly adds to his work the secondary title "a contribution to the syntax of the Sanskrit language," and this it plainly is not; we see here another example of the too common misapprehension that what illustrates Pāṇini casts light upon Sanskrit. Of the author's own summary of results, the only item to be approved, as really following from the investigation, is that "the doctrine of Pāṇini reposes upon a careful and acute observation of the actual language:" and this ought not to have required proof. Better, also, "of *an* actual language," since Pāṇini's care and acuteness are less in question than the character of the tongue he represents. That that tongue was especially a book-language, as the author's further remarks seem to indicate that he regards it, is doubtless an untenable view.

Four years later, in the same Journal (Bezzenger's *Beiträge* etc., vol. xvi., 1890), a kindred subject is taken up by Dr. R. Otto Franke (now *privat-docent* at Berlin), in a paper entitled "the case-system of Pāṇini compared with the use of the cases in Pāli and in the Aṣoka inscriptions." The author builds upon Liebich's foundation, looking in the later dialects mentioned for agreement with the Paninean scheme as drawn out by the latter, and finding as much as was reasonably to be expected, besides, in other departments of syntax, a curious coincidence or two which were beyond expectation. As the ground is less worked over, his harvest of new facts is fuller than that of Liebich. His general views as to Pāṇini and his Sanskrit seem open to criticism. He greatly exaggerates the importance of Liebich's articles, and writes as if it were possible for any reasonable persons to imagine that the Aitareya-Brāhmaṇa, or the Pāli and the inscriptions, were the exclusive, or the principal, basis of Pāṇini's rules; or that Pāṇini may have "collected the phenomena of very diverse dialects, and fused them together into an integral whole."

But the question as to what Pāṇini's language really was is approached again by Dr. Franke under the heading "what is Sanskrit?" in Bezzenger's *Beiträge*, vol. xvii. (1891; but the article is dated at the end Nov., 1889). The first half of the discussion turns on the question what Pāṇini means by *bhāṣā*, and reaches the very plausible conclusion that it is no Prākṛit, but unapproved Sanskrit. Of the second half the result is that "Pāṇini's Sanskrit is accordingly in the main *bhāṣā*. And yet, on the other hand, it is neither *bhāṣā* nor a living language:" which is not very clear. It is quite unaccountable that these authors take no notice of the dramas, which set before us a state of things, unquestionably at one time a real one, when educated people talk

Sanskrit and uneducated Prākṛit. That is precisely the present character of Sanskrit, the spoken and written tongue of the educated class ; that has been its character for over 2000 years ; and that must have been its character at the beginning, when the distinction of Sanskrit and Prākṛit first arose. That it was originally a vernacular is a matter of course, though one soon stiffened and made somewhat unnatural by grammatical handling ; it was the tongue which Pāṇini and his like themselves spoke, and which they thought alone worthy to be spoken by others—of which, therefore, they tried to lay down the laws. In his conspectus of the views of various scholars upon the subject, Franke quotes a very old statement of Weber's, to the effect that “ the development of Sanskrit and of the Prākṛit dialects out of their common source, the Indo-Aryan mother-tongue, went on with absolute contemporaneousness (*vollständig gleichzeitig*).” But this seems scientifically untenable. It would imply, for example, that *attā* (or *appā*) and *ātmā*, that *pakkhitta* and *prakṣipta*, that *hodu* and *bhavatu*, and their like, are contemporaneous developments, while it is clear that the former in each case is the altered representative of the latter, than which nothing older and more original is attainable even by linguistic inference on Indian soil. The great mass of Prākṛit words, forms, constructions imply the corresponding Sanskrit ones as a stage through which they have themselves passed. That here and there exceptions are met with, altered items of which the original is not found in Sanskrit, or is found in Vedic Sanskrit, is without any significance whatever against the mass. The history of dialects shows no dialect descended *en bloc* from an older one, and such exceptions might equally be relied on to prove Italian and French “ absolutely contemporaneous ” with Latin.

In the same year (1891), Dr. Liebich published a valuable collection of studies entitled “ Pāṇini : a contribution to the knowledge of Sanskrit literature and grammar ” (8vo., 164 pp.). The first study, or chapter, deals with Pāṇini's period, reviewing briefly the opinions of scholars, and, without bringing forward new evidence, arriving at the date “ after Buddha and before Christ ” as a merely probable conclusion. The second treats of Pāṇini's chief successors and commentators, as to whom much the same chronological uncertainty prevails. The third is an attempt to find his place in the literature, by a new method, a statistical one : the author counts off a thousand successive personal verb-forms in four works, the Aitareya-Brāhmaṇa, the Bṛhad-Araṇyaka, two Gṛhya-Sūtras, and the Bhagavad-Gītā, and applies to them the rules of the native grammar, to see how many and what of them are against rule. The test is made with creditable learning and industry, and the results are interesting, but really illustrative only, as bringing to light nothing that was not well known before. The matter is one to which the statistical method is not very well suited ; this is decidedly more in place in the secondary inquiries raised in chapters six and seven, where it is cleverly shown that the last chapters of the Aitareya-Brāhmaṇa are of later origin than the rest (as already

believed, on other grounds), while the whole substance of the Bṛhad-Araṇyaka is fairly homogeneous. It is much to be regretted that, instead of the acknowledgedly late Bhagavad-Gītā, the author did not select as example of the epic language some part of the Mahābhārata which could plausibly be regarded as belonging to its original nucleus. The fourth chapter, headed "Pāṇini's relation to the language of India," is chiefly made up of a review of the opinions of other scholars as to the position of Pāṇini's Sanskrit among the dialects of India, the author adding a statement of the results of his statistical examination as his own view; and he closes with a new and wholly unacceptable general classification of the entire body of dialects. He makes three principal divisions: pre-classical, classical, and post-classical. To the first he assigns only the language of the Vedic saṁhitās, the *mantra*-dialect; the second he makes include the Brāhmaṇa and Sūtra language (which he had elsewhere shown to be notably older than Pāṇini), together with "the doctrine of Pāṇini;" and in the third he puts, along with the epic or extra-Paninean, all the literature which we have been accustomed to call "classical," by Kālidāsa and the rest! Liebich's classical "doctrine of Pāṇini" can only include, besides Pāṇini's grammar itself, what in my former paper I called "the non-existent grammarians' dialect," because nothing had ever been written in it; Liebich now acknowledges that this and the real language of the literature even belong to different primary periods of the history of Indian language—which is more than I had ever ventured to claim!

Just half of Dr. Liebich's volume is occupied by two so-called Appendixes, containing digests of the teachings of the native grammar in regard to the voice-inflection of the verbal roots (as active or middle or both), and to the formation of feminine declensional stems. These are, in my opinion, the substantially valuable part of the work, exemplifying what needs to be done for all the various subjects included in the grammar; and the next step must be to compare the schemes with the facts of the literary language, in order to see what are the differences and to infer their reason.

There is left for notice only the fifth chapter, in which the author attempts to answer the objections of my former paper to thrusting the grammarians' Sanskrit on our attention in place of the real Sanskrit of the literature. The first point, that of the twelve hundred unguine roots in the *dhātupāṭha*, he, after the manner of the students of the native grammar in general, slips lightly over, with the suggestion of possible interpolations since Pāṇini's time—as if that relieved of responsibility the native grammatical system as it lies before us, or as if interpolation could explain the increase of eight or nine hundred roots to over two thousand! Till this increase is accounted for (if it ever can be), it becomes the admirers of the Hindu grammar to speak in humble tones. It is equally difficult to suppose that Pāṇini should have accepted the whole list and that any one should have thrust in the false roots, undetected and unhindered, since his period.

As to the middle periphrastic perfect and the middle precativ, Dr. Liebich says nothing that changes at all their aspect as stated by me:

that they are formations "sporadic in the early language, and really extinct in the later, but erected by the grammarians into a regular part of every verb-system." And the same is true in its way of the secondary passives. How much shadow of excuse Pāṇini may have had for giving to them the value he does is a secondary question. *Prayoktāse* at TS. ii. 6. 2³ is, in my opinion, shown to be 1st sing., and not 2d, by the occurrence of *te* in the sentence with it; the isolated and wholly anomalous *yaṣṭāhe* of TA. i. 11. 4 may be conjectured to be a corrupt reading, and the sole foundation of the grammarians' 1st singular.

In excuse of Pāṇini's two rules (viii. 3. 78, 79) defining when *ḍhvam* and *ḍhve* are to be used in 2d pl. mid., the author first suggests, without carrying out and either accepting or rejecting, the theory of a misinterpretation by the later grammarians: the sign *in* has two very different possible meanings; and it is uncertain what elements of the first rule are carried over by implication into the second. These ambiguities are to the discredit of the grammar; especially the second, which is a pervading one: in numberless cases we know not what a Paninean rule means until we know from the literature what it ought to mean, and then interpret it accordingly. Next it is pointed out that, after all, *ḍh* and *dh* are very little different, and perhaps Pāṇini's ear failed sometimes to distinguish them properly! This virtually gives away the whole case, making Pāṇini's word worthless not only here but in every other question of euphony; even I have never charged him with anything so bad as that. Finally, Liebich doubts of the connection of cause and effect in matters of language; we might properly expect to find *ḍh* sometimes without any reason for it. The utter futility of the whole reply is palpable. Pāṇini lays down a distinct statement as to when *dh* and when *ḍh* is to be used; and he makes the difference depend upon a circumstance which evidently can have no bearing upon it; and all the (few) facts of the literature are against him. As for his inclusion of the perfect ending *dhve* in the same rule, that could have reason only if the original and proper form of the endings were *sdhvam* and *sdhve*; and, if that were so, we should find *ḍh* in forms of the present-system also.

Passing over certain topics in my paper (the most important of them being the grammarians' derivation of the reduplicated aorist from the causative stem instead of from the root), Dr. Liebich takes up finally the defense of Pāṇini's classification of compounds, and especially of the so-called *avyayībhāva* class of adverbial compounds, regarded as primary, and coördinate with copulative, determinative, and possessive. According to him, the true fundamental principle of classification is furnished by the syntactical relation of the two members of the compound to one another: in the determinatives, the former member is dependent on the latter; in the copulatives, both are coördinate; in the possessives, both are alike dependent on a word outside the compound, which they qualify adjectively; then, finally, in the adverbial (e. g. *atimātram* 'excessively,' from *ati* 'beyond' and *mātrā* 'measure'), the latter member is dependent on the former. Calling the dependent

element *minus* and the other *plus*, we thus have the scheme *minus-plus*, *plus-plus*, *minus-minus*, and *plus-minus*, which is plainly exhaustive: no more are possible; no fewer are consistent with completeness. The scheme is thus drawn out by some of the later grammarians, though not expressly by Pāṇini himself; but Liebich is confident that the latter knew and acknowledged it, being hindered from its full adoption by considerations of brevity: brevity, it may be added, being in his text-book well known to be the leading consideration, to which everything else is to be sacrificed—to us hardly a recommendation of the work. But it has never been found, I believe, that the facts of language could be successfully treated mathematically; and so it seems to be here. There is no such thing as a *plus-minus* class of compounds, and perhaps Pāṇini was acuter than his successors (including our author) in seeing that this is the case. Not that there is no *plus-minus* relation between the elements of *ati-mātram*; but so there is a *minus-plus* relation between those of the possessive *mahābāhu* ‘having great arms.’ As the conversion of the latter to adjective value overrides the internal relation and makes the whole *minus-minus*, so does also the conversion of the former to adverb value. Calling the adjective-making influence *a*, and the adverb-making *b*, then, if (*minus-plus*)^a = *minus-minus*, certainly (*plus-minus*)^b = *minus-minus* as well. In very fact, however, *atimātram* is the adverbially used accus. neut. of the adjective *atimātra* ‘excessive’; and so, I confidently hold, are by origin all its fellows; and the *avyayībhāva* stands at a double remove from *plus-minus* value. The asserted primary class is not even a subclass, but only one group in a list of utterly heterogeneous character.

At the close of his chapter, Dr. Liebich, conceiving himself to have refuted me everywhere, compassionates me for not having made a happier selection of points for objection. I, on the contrary, feel quite satisfied with them, as having withstood undamaged all his attacks; but I am willing to add one more, which, indeed, he urges on my attention. He, namely, lifts up hands of horror (p. 61) at me for pronouncing (in my Skt. Gr.) something “barbarous” which Pāṇini teaches. The matter alluded to is the formation of comparative and superlative predication by adverbial endings: thus, *dadāti* ‘he gives,’ *dadātitarām* ‘he gives more,’ *dadātitamām* ‘he gives most’—precisely as if one were to say in Greek *διδωσιτερον*, *διδωσιτατον*. It may be maintained, without fear of successful contradiction, that such formations, no matter who authorizes them, are horrible barbarisms, offenses against the proprieties of universal Indo-European speech. The total absence of anything even suggesting their possibility in the pre-Paninean language, and their great rarity later, among writers to whom a rule of Pāṇini is as the oracle of a god, shows sufficiently that they are not real. Doubtless they were jocose or highly slangy modes of expression, which some unexplainable freak led Pāṇini to sanction.

Liebich’s *Pāṇini* is reviewed by Dr. Franke at considerable length in the *Gött. Gel. Anzeigen* for 1891 (pp. 951 ff.), though less in the way of a detailed examination and criticism of its statements and opin-

ions than of an independent discussion of some of the points involved. Many pages, however, are expended upon Pāṇini's classification of the compounds ; and here the critic by no means supports Liebich's views, but rather takes my side, and helps to expose the superficialities and incongruities of Pāṇini's treatment of the subject. In other respects the notice is a laudatory one, going so far as to "thoroughly approve," as "very successful," Liebich's special pleadings respecting the ending *ḍhvam*—including, we must suppose, the suggestion of Pāṇini's defective ear, and the denial of a connection between cause and effect in Sanskrit euphony. It even adds a further argument of a like character : that in Prākṛit *ḍh* sometimes takes the place of *dh*, and that Prakritic changes sometimes work their way into Sanskrit. So in Prākṛit, and on a very large scale, *n* becomes *ṇ* ; but that would hardly support a Hindu grammarian who should teach that a *r* altered the next following *n* to *ṇ* only when itself preceded by certain specified sounds. The question of the twelve hundred false roots Franke passes over with the same cautious carelessness as Liebich, as if it were a matter of no real account.

The last publication we have to notice is again by Liebich, a small volume (8vo, pp. xl, 80, Breslau, 1892), entitled "Two chapters of the *Kāçikā*." It contains a simple translation of the exposition given by that esteemed and authoritative commentary for the rules of Pāṇini that concern compounds ; and there is prefixed an ample introduction, in which the absolute four-fold classification, spoken of above, is drawn out, illustrated, and defended much more fully than in the same author's *Pāṇini*. This introduction, though dated later, must probably have been prepared and printed earlier than Franke's criticism of the *Pāṇini*, for the author could otherwise hardly have so ignored the rejection of the theory by his fellow partizan of the Hindu grammar. The volume is valuable as smoothing the way a little to the comprehension of Pāṇini for those who shall approach it hereafter ; but its method is a narrowly restricted one ; it refrains from all attempts at independent explanation, and yet more from all criticism. It is content, for example, to report without a word of comment the two discordant interpretations which are offered by the *Kāçikā* for the extremely difficult introductory rule, and which plainly indicate that it did not itself quite know what the rule was meant to say. No one can well fail to be repelled by the fantastic obscurity with which the subject of compounds is presented in these chapters ; and we have seen above that the underlying theory is a very defective one : how absurd, then, to require that students of Sanskrit should derive from such sources their knowledge of Sanskrit composition !

I would by no means say anything to discourage the study of Pāṇini ; it is highly important and extremely interesting, and might well absorb more of the labor of the present generation of scholars than is given to it. But I would have it followed in a different spirit and a different method. It should be completely abandoned as the means by which we are to learn Sanskrit. For what the literature contains the liter-

ature itself suffices; we can understand and present it vastly better than Pāṇini could. It is the residuum of peculiar material involved in his grammar that we shall value, and the attempt must be to separate that from the rest of the mass. And the study should be made a truly progressive one, part after part of the native system being worked out to the last possible degree and the results recorded, so that it shall not be necessary for each generation to begin anew the tedious and unrewarding task.

4. Announcement of an edition of the Jāiminiya or Talavakāra Upanishad-Brāhmaṇa; by Dr. Hanns Oertel, of Yale University, New Haven, Conn.

Dr. Oertel gave a brief account of Burnell's discovery in Southern India of Grantham manuscripts of the Jāiminiya or Talavakāra Brāhmaṇa (of which the Upanishad-Brāhmaṇa forms the fourth or concluding book), and of his sending them to Professor Whitney, by whom, with the help of other scholars, they were copied and collated (see Proceedings for May, 1888, Journal, vol. xi., p. cxliv). The fifteen years since elapsed have failed to bring to light any new material. Under these circumstances, it does not seem premature to make public that part of the Brāhmaṇa whose text is least corrupt—the only part of the extensive work which admits of being edited in full, namely the Upanishad-Brāhmaṇa. All the manuscripts are very inaccurate, and they also evidently go back to the same faulty archetype, so that in many passages they present the same corrupt and unintelligible text. Such passages are most numerous in the first chapter (*adhyāya*). It may be hoped that, the text being made accessible, difficulties which must now be left unsolved will be at least in part removed by further comparison with other texts and by skilled conjecture.

The work is divided into four chapters. Each of the first three has a colophon, and the last three sections (*khaṇḍa*) of the third are a *vaṇṇa*. The last chapter is made up of heterogeneous material. It opens with three sections of *mantra*. The last two sections of the ninth division (*anuvāka*) are again a *vaṇṇa*. Then follows the Kena-Upanishad, in four sections, one division; and two more divisions end the chapter and the work proper: the *ārṣeya-brāhmaṇa*, published as a separate work by Burnell, comes after and ends the manuscript.

In general, the contents of the Upanishad-Brāhmaṇa are of one class with those of other similar works. Of most interest to us, perhaps, is the legendary material. For more than a dozen legends corresponding ones are found in other texts already published, with more or less of resemblance and divergence. Of others, to which no parallels have been discovered elsewhere, perhaps the most notable is the story of Uccāṅgravas Kāupayeya, king of the Kurus, and his friend Keçin Dārbhya: "They were dear to each other, and then Uccāṅgravas Dārbhya departed from this world. When he had departed, Keçin Dārbhya went hunting in order to get rid of his gloomy thoughts. While he was roaming about, Uccāṅgravas stood before him. 'Am I

crazy, or do I know thee,' said Keçin to him. He answered: 'Thou art not crazy; thou knowest me; I am he whom thou thinkest me to be.' And he goes on to explain that he has come back to comfort and instruct his friend. "Keçin said: 'Reverend sir, let me now embrace thee;' but, when he tried to embrace him, he escaped him, as if one were to approach smoke, or wind, or space, or the gleam of fire, or water; he could not take hold of him for an embrace. He said: 'Truly, what appearance thou hadst formerly, that appearance thou hast even now; yet I cannot take hold of thee for an embrace.' And then the king informs him that he has shaken off his corporeal body because a Brahman knowing the *sāman* which Prajāpati revealed to his dear son Patanga sang for him the *udgītha*. Thereupon Keçin seeks in vain among the Brahman-priests of the Kurus and Pañcālas for a knower of this *sāman*, till at length he meets Prāṭṛda Bhālla, who answers his questions correctly, and whom he chooses as *udgātar* for his twelve-day sacrifice.

Bhṛgu and Naciketas visit the other world; but no further example is known in Vedic literature of an inhabitant of the other world who returns to this in order to comfort and instruct a friend.

The edition will comprise: 1. The transliterated text, with full list of various readings; 2. a purely philological, literal translation; 3. notes, chiefly references to parallel passages; 4. indexes of names, quotations, and the more important grammatical and lexical points.

5. The influences of Hindu thought on Manichæism; by Mr. Paul Elmer More, of St. Louis, Mo.

The Manichæan religion, which was promulgated by Mānī, a Persian, in the third century of our era, and which spread rapidly from Babylon to the east as far as China and westward with the Roman Empire, is an admirable example of the syncretic method of thought of that age. It is the deliberate attempt of a religious reformer to fuse into one homogeneous system Zoroastrianism and Christianity, the two religions then struggling for supremacy on the borderland of the Persian Empire. Probably the Zoroastrianism which forms the background of his syncretism is tinged with the Semitic superstitions prevalent in Assyria; certainly the Christian elements adopted are gnostic rather than orthodox. Baur and several of the later historians have endeavored—unsuccessfully, as I think—to show that the Christian elements are not an integral part of Manichæism, but rather nominal additions to an ethnic religion already complete in itself. Such a view appears to me altogether to miss the true spirit of Mānī's purpose, and of the manner of thought of his age. However, it remains conceded by all that in one way or another Manichæism is put together out of Persian and Christian elements.

The influence of Hindu thought, and of Buddhism in particular, on this religion is more a matter of dispute. The great historians have expressed different views on the subject. Geyler, in his dissertation *Der Manichæismus und sein Verhältniss zum Buddhismus*, merely enum-

erates a number of detached correspondences in details of faith and practice. Unfortunately, the publication by Flügel of the portion of the *Fihrist* of Muḥammad ben Ishāk bearing on Manichæism naturally fosters such a method of comparison. The Arabian encyclopedist adds a number of details to our knowledge of the more extravagant side of the heresy, but in a manner which tends to draw the student away from the more philosophical presentation by St. Augustin, on whom Baur and the earlier historians had mainly to depend. What I wish to establish is briefly this: First, that Mānī was influenced not by Buddhism alone, but by that whole movement of Hindu thought of which Buddhism is a single part; and, secondly, that this influence is seen not so much in the addition of new rites and dogmas borrowed from Buddhism as in the subtle spirit of India thoroughly permeating those already adopted from Persian and Christian sources.

In approaching this question, two avenues of information must be considered: to wit, historical tradition and internal evidence. As might be expected, historical statements on such a subject are suggestive but extremely vague. It is recorded however in the *Fihrist* that Mānī traveled for forty years, visiting the Hindus, the Chinese, and the inhabitants of Chorasan. Some tradition also of the Buddhistic sources from which he drew seems to have lingered in the minds of the early chroniclers; and, as so often happens, these abstract ideas became personified, and figure with fabulous names among the followers of the reformer. It is not my intention here to discuss this side of the question. The following brief quotation from Renan's *Histoire des Langues Sémitiques* sums up the matter admirably: "Bud-das figure tantôt comme maître, tantôt comme disciple de Manès; Scythianus (Çakya?), le propagateur du Manichéisme en Occident, voyage dans l'Inde; enfin les auteurs arabes désignent tous comme fondateur du Sabisme un personnage du nom de Budasp ou Budasf. Il n'est pas impossible que l'Evangile de Manès, ou l'Evangile selon Saint Thomas, ne fût quelque soutra bouddhique, le nom de Gotama étant devenu karā Θωῶν.".

On the other hand, internal evidence, drawn from a study of the religions themselves, justifies a more positive view of their relationship. It has been remarked that Hindu thought moves in cycles. Certainly, during the centuries just before and after our era, we see such a wave of thought sweep over India, changing the whole religious and intellectual life of the people. The Sāṅkhya philosophy, Buddhism, Jainism, and the Krishna cult apparently arose and developed side by side, being the various aspects of one great revolution. Their points of contact are numerous and essential; and doubtless, if the complete literature of the time were at our command, their origin and growth would show still more striking phases of resemblance. Now details of belief and worship may be detected in Manichæism which appear to be borrowed from one and another of these cults; but beyond this there is yet a deeper influence clearly perceptible. Mānī, we must believe, spent a number of years in northern India, traveling far and wide. We know,

too, from the *Fihrist* that the conception of his religious reform was already in his mind when he set forth from Assyria. Accordingly, we should expect to find traces of Hindu thought not so much in the framework of his system and in the details of construction as in the general tone and coloring of the whole. It is scarcely possible to believe that an earnest searcher after the truth should have been for years under the influence of this tremendous moral and intellectual ferment without bearing away just such traces of it in his mind. In the same way the philosophic student even of to-day who reaches this old Hindu life through the dust of dictionaries, although his intellectual *credo* is not altered by the study, finds perhaps that a peculiar spell is laid over his whole manner of thought.

An examination of the doctrines of Mānī makes this conjecture a certainty. The influence of Hindu thought is seen to be secondary and yet very profound. Dogmas already received are given a deeper meaning, and forms already adopted take on a new and wider significance. Thus Manichæism starts with the Zoroastrian conception of two co-eternal and hostile powers, of good and of evil, of light and of darkness. Now, in the Persian books, Ahriman opposes the god of light at every point, to be sure; yet creation was originally good, and the evil works of Ahriman are a later corruption. In the *Bundahish* (xv. 6), we are even told that Mashya and Mashyôî first believed that the world was created by Ormazd, and that afterwards they believed Ahriman to be the creator. From this falsehood Ahriman received his first joy. By this falsehood they both became *darvands*, and their souls shall remain in hell even unto the resurrection. Aji Dahāka, the great dragon, was expressly created by Ahriman to destroy the handiwork of the god of light. The material world is primarily righteous; and it is the first duty of man to support *asha*, the existing order of things, against the assaults of the demons. Here the influence of Hindu conceptions on Manichæism is evident. The struggle between Mānī's god of light and Eblis, the prince of darkness, becomes more intimate and far-reaching. The contest is no longer carried on in a neutral region between the two opposing powers, like two armies in battle array, but is waged in every particle of matter between the two natures contained within it.

The contest comes about in this way: The *regnum lucis* is threatened with invasion by the *principes tenebrarum*, who from the dark abyss behold its glory and are enamored of it. An emanation of God, called the *Primus Homo*, descends into the depths to combat them. The five gross material elements belong to the *regnum tenebrarum*; and to oppose these he first arms himself with a panoply of the five finer elements representing the spiritual counterpart of these—an idea probably suggested by the Sāṅkhyan theory of the five *tanmātras* and the five *mahābhūtas*. He is for the time overwhelmed by Eblis, or Saclas, as the demon is sometimes called; part of his panoply is rent away from him, and out of the union of these finer elements, or soul, with the gross matter of the *regnum tenebrarum* springs the existing order of things, the soul being held by force in the bonds of matter, and giving it

form and life. Creation is then essentially a work of evil; matter as in all the phases of the Hindu cycle of thought, is altogether base; and the great struggle now waging is the effort of the imprisoned soul, or emanation of light, to free itself from the bondage of the world. It is to be noticed however that Mānī's conception of evil, although deepened and spiritualized by Indian mysticism, remains primarily Persian. Evil for him is an actual and active principle, eternal in its nature, and far removed from *māyā*, or mere illusion.

The process of redemption is the point of contact with Christianity, and from now on our heresy will be found Christian rather than Persian. In other words, Mānī's system may be divided into two great periods, one of involution, or mingling of spirit and matter, adopted from Zoroastrian sources; and the second of evolution, or the separation of spirit and matter, borrowed chiefly from the Christian faith. This division is not, of course, a hard-and-fast one, but in the main makes evident the nature of the syncretism. In this second part of the system, Christian ideas are modified by Hindu thought in a manner precisely similar to the process already described. The Christian terminology and ritual are maintained, but the mission of the Christos is deepened and extended. The labor of salvation is no longer confined to the action of a man or god-man living his life in Palestine, but becomes the cosmic struggle of the *Weltgeist* striving upward toward deliverance. It is the Buddhist or Jaina conception of the progress toward release aided onward by the appearance of the Enlightener. St. Paul's mystical utterance, "The whole creation groaneth and travaileth in pain together," makes it easy to understand how such Hindu notions could be involved in Christian terminology; and the conclusion of this same passage, "until now . . . waiting for the adoption, to wit the redemption of our body," shows at the same time how far-reaching was the change wrought by the influence of India. A brief survey of the Manichæan Christology will make the subject plainer.

Mānī distinguishes between the Christos and Jesus. The general name of the emanation from the kingdom of light is the *Primus Homo*; this is regarded in two ways, as a passive principle (*δύναμις παθητική*) suffering the bondage of the world, and as an active principle (*δύναμις δημιουργική*) effecting its own deliverance. Now the former is called the *Jesus patibilis*, while the latter is the *Christos*. When the world was created out of the union of the spiritual *Primus Homo* and the material *regnum tenebrarum*, the purest portion of the mixture, that containing the most light, was placed in the sky as the sun and moon. Their light, together with the atmosphere (which is the Holy Ghost), acting on the earth, produces life; life is the struggle of the imprisoned soul upwards toward reabsorption into the kingdom of light. In this process the sun and moon, the life-giving light (called also the *Primus Homo*, the Son of God), are the Christos; the spirit dormant in the earth and awakened by their touch is the *Jesus patibilis*. Every tree that expands its leaves in the warm breath of heaven, every flower that paints its blossoms with the colors of the sky, is only an expression of

the upward striving of the weary *Weltgeist*. So the agony of the crucifixion became symbolical of the universal passion, and Jesus was said to be *omni suspensus ex ligno*. The feeling which inspired this conception of the suffering Jesus is beautifully told in that stanza of Omar Khayyâm :

Now the New Year reviving old Desires,
The thoughtful Soul to Solitude retires,
Where the White Hand of Moses on the Bough
Puts out, and Jesus from the Ground suspires.

Now when the demons of evil see that the light which they possess is thus gradually withdrawn from them, they are thrown into despair. They conspire among themselves, and, by a curious process of procreating and then devouring their offspring, produce man, who contains the quintessence of all the spiritual light remaining to them. Adam is begotten by Saclas and Nebrod, their leaders, in the likeness of the *Primus Homo*. He is given the glory of the world, is made the microcosm or counterpart of the universe, that by the excellence of his nature, as by a bait, the Soul may be allured to remain in the body. He is created by the lust of the demons ; his own fall consists in succumbing to the seductions of the flesh ; and through the process of generation the spirit is still held a bond-slave in the world, passing from father to son. As the Christos acting in the sun awakens the inanimate earth, so too he appears as a man among men, as Jesus of Nazareth, teaching the way of salvation. Release comes only with the cessation of desire, and this again is brought about only through the true knowledge, or Gnosis, imparted by the Savior. In all this we see strong traces of the Zoroastrian sun-worship, as might be expected. The Christos represented as *distentus per solem lunamque* points at once to Mithra, the sun-god and mediator. But the significant modification comes rather from India. The whole conception of Christ's mission is changed ; and the labor of his life is to proclaim the way of release to the spirit already groping upward, rather than to act as mediator between man and God. His incarnation is only one brief event in the long struggle of Jesus and the Christos. In accordance with this, the doctrine of Docetism was imported from India, either directly or through the earlier Gnostic sects. Docetism is a transparent adaptation of the Hindu Mâyā which plays so important a rôle in Indian philosophy, in later Buddhism, and in the Krishna cult. A single quotation from the *Bhāgavata Purāṇa* or the *Lotus of the True Law* would show the close resemblance of these doctrines—and might at the same time throw light on the vexed question of borrowing between Christianity and the Krishna cult ; for surely no one would care to maintain that Mâyā is a western conception, originating in Gnostic Docetism. For instance, we read in the *Bhāgavata Purāṇa* (iii. 15. 5, cited by Senart) “ It is through his Mâyā, by means of Mâyā, that Bhagavant has taken on himself a body ; ” and in the *Lotus of the True Law* (chap. xv., SBE. xxi. 302) it is written : “ The Tathāgata who so long ago was perfectly enlightened is unlimited in

the duration of his life ; he is everlasting. Without being extinct, the Tathāgata makes a show of extinction, on behalf of those who have to be educated." Precisely the same words might be used to express the Gnostic and Manichæan doctrine of the Christ.

So too the dogma of sin as consisting in desire instead of disobedience, and, in accordance with this, the resulting system of ethics, are distinctly Hindu. The chief duty of man is to abstain from satisfaction of the desires of whatever sort, that he may not plunge the soul still deeper in the slough of sense. Marriage was abhorred as evil above all things, in flagrant contradiction of Persian and orthodox Christian views. In the constitution of the Manichæan church we see the same principles at work. This was divided into two bodies, the *electi* (or *τέλειοι*) and the *auditores*, in imitation of the orthodox church, the *auditores* taking the place of the catechumens. At first one might be tempted to consider the word *auditor* as a direct translation of the Buddhist *çrāvaka* ; but the latter in his duties corresponds perfectly to the *electus* and not to the *auditor*. Furthermore, the adoption of Christian sacraments shows that the church was organized after western models rather than Indian ; and yet the essential meaning of the organization leads us at once to the great Hindu religions of the time. The chief duty of the elect, besides chastity, was *ahiṃsā*, carried almost to the extremities found among the Jainas. The whole purport of their life, not to go into details, reminds us more of the Bhikṣus and Nirgranthas than of anything in Western manners. Furthermore, the principal duty of the auditors is precisely that of the Buddhist *Upāsakas*. Their connection with the elect consisted mainly in providing the latter with food, in order that these might be saved the awful sin of destroying even vegetable life. Like the *Upāsakas*, too, the auditors were allowed to marry and mingle with the world. At death the souls of the elect were transported up to the kingdom of light, into a state of being not unlike the Nirvāṇa of the Jainas, and possibly of the Buddhists. The auditors passed through a long series of transmigrations, while the wicked were cast into hell. Metempsychosis plays a comparatively subordinate part in the Manichæan faith, but shows nevertheless how profound was the influence of India on the whole system.

Certain of the Christian sacraments, as has been mentioned, were accepted by the Manichæans. Of their manner of baptism we know little ; but the Eucharist received among them the same curious modification. As the *Jesus patibilis* was said to be crucified in every plant, so the faithful were supposed to partake of the body and blood of Jesus at every meal, for they ate only vegetable food.—But it is not my purpose here to go into the details of the Manichæan syncrasis, or to institute any such minute comparison. Sufficient has been said, I hope, to indicate how the real influence of Hindu thought on Manichæism is to be found in the extension and modification of the whole body of dogmas and rites brought together from Persian and Christian sources.

6. The plural with pronominal suffixes in Assyrian and Hebrew; by Mr. George A. Reisner, of Harvard University, Cambridge, Mass.

In the inscriptions of the time of Hammu-rabi there are traces of a diptote declension of the plural: viz., nom. *u* (û?), and gen. *i* (î?). The plural in *u* occurs four times, as follows: Biling. Insc. H. Col. ii., line 9, *ni-šu ra-ap-ša-tum li-iš-ti-mi-ga-kum*; Cyl. Insc. H. Col. i., line 7, and also Col. ii., line 4, *šarru ša ip-ša-tu-šu a-na ši-ir Sh. u M. ta-ba*; Samsu-iluna, Col. iii., line 1, *mu-šar-bi-u šar-ru-ti-ya*. The first three are plainly nominatives; and the last one, I think, is as plainly a nominative-absolute, such as occurs often in Assyrian.

It is true that this evidence is meager; but it is uniform, and it is supported in a measure by the contract tablets: cf. Meissner, *B. z. Altbab. Privatrecht*, No. 48, line 25, *ši-bu-tum pa-nu-tum, ša Mar-ilu-Mar-tu i-na bab ilu Nin-mar-ki Ilu-ba-ni lu-u ma-ru a-na-ku u-ša-mu ik-bu-u-ma, kiram u bitam a-na Ilu-ba-ni u-bi-ru*; No. 78, lines 4-7, *a-na ta-az-ki-tim da-a-a-ni ik-šu-du-u-ma a-na bit ilu Šamaš i-ru-bn-u-ma i-na bit Šamaš da-a-a-nu di-nam u-ša-ḫi-zu-u-šu-nu-ti-ma*. Several times also a plural in *u* seems to be used as a nominative absolute. Cf. No. 77, line 1, 5 GAN *eklim bi-ri-a-tum*; and No. 24, line 1, 140 ŠE *na-aš-pa-ku-tum*, where a sentence intervenes before the rest of the tablet.

The evidence is confirmed by the Tel-el-Amarna Tablets, which contain the following examples: Berlin VA. Th. 152 (Winckler, No. 8), line 11, *um-ma-a ki-i ab-bu-ni it-ti a-ḫa-mi-iš ni-i-nu lu ta-ba-nu*, 'Saying, as our fathers (were) with one another, we, let us be friendly'; line 13, *i-na-an-na damkar-pl-u-a, ša itti Aḫu-ṭa-a-bn ti-bu-u, i-na matu Ki-na-aḫ-ḫi a-na ši-ma-a-ti it-ta-ak-lu-u*; Berlin VA. Th. 151 (Winckler, No. 6), back, line 4, *šum-ma la-bi-ru-tum ya-a-nu iš-šu-ti li-il- . . .*, 'If there are no old ones, let [them take?] new ones' (acc.); Berlin, unnumbered (Winckler, No. 3), line 14, *aššatu-pl ba-na-tum i-ba-aš-ša*; and line 24, *binatu-pl-u-a i-ba-aš-ša-a*; Bulaq 28179 (Winckler, No. 9), back, line 10, *ma-ta-tum ru-ka-tum ni-i-nu*, 'Distant countries (are) we (ours)'. These are all apparently nominatives. Once, in (London 81) P.S.B.A. vol. x., p. 562, front, line 19, the word *gab-bi-šu-nu* occurs as a plural nominative agreeing with *Ku-na-ḫa-a-u*. Besides these examples, there are no other nominative plurals in these tablets. Once also, Winckler, No. 7, line 37, the phrase *šar-ra-ni ma-aḫ-ra-nu-ma* is a genitive. Everywhere else, the genitive and accusative end in *i*. Cf. also Agum-kakrimi, col. vii., line 19, *ir-bi-tu*.

To sum up, then, I conclude that, in the time of Hammu-rabi and for some time after that, the plural in Assyrian was declined after the diptote scheme, like the Arabic sound-plurals. Later, however, the distinction between the *u* and the *i* case was lost.

Further, with the pronominal suffixes, these terminations *u* and *i* are retained—see the examples above. So, later, when the distinction between the *u* case and the *i* case was lost, *i* + the pronominal suffix is found in all cases with both feminine and masculine. Now, comparing

this with the Hebrew, we find that there too the plural, whether feminine or masculine, with pronominal suffixes, ends in *i*. And I wish to suggest a similar process of development in Hebrew to that which has taken place in Assyrian. First, then, whether the feminine in *u-i* is originally made simply by analogy from the masculine or not, the Hebrew feminine וְיָ — with pronominal suffixes goes back to a real usage of this full form without the pronominal suffixes. Second, this full form וְיָ — is descended from a diptote declension of the plural (masculine and feminine) in *u-i*. And, finally, this makes probable a general Semitic diptote declension in the plural at a somewhat early stage in the development of the language.

7. On the so-called Chain of Causation of the Buddhists ; by Mr. Henry C. Warren, of Cambridge, Mass.

“Chain of Causation” is the title given by Occidental students to the formula which embodies the Buddha’s effort to account for the origin of evil. The formula itself is as follows : “On Ignorance depend the *saṃkhāras* ; on the *saṃkhāras* depends Consciousness ; on Consciousness depends Name-and-Form ; on Name-and-Form depend the Six Organs of Sense ; on the Six Organs of Sense depends Contact ; on Contact depends Sensation ; on Sensation depends Desire ; on Desire depends Attachment ; on Attachment depends Existence ; on Existence depends Birth ; on Birth depend Old Age and Death, Sorrow, Lamentation, Misery, Grief, and Despair.”

Chain of Causation is an unfortunate title, inasmuch as it involves the use of Occidental categories of an exacting kind into which to fit, as into a Procrustean bed, Oriental methods of thought. As a natural consequence, this same Chain of Causation has proved a stumbling-stone and rock of offense to some of the best European scholars. Oldenberg, for example, in his *Buddha* (Hoey’s translation, pp. 226-7), says : “The attempt is here made by the use of brief pithy phrases to trace back the suffering of all earthly existence to its most remote roots. The answer is as confused as the question was bold. It is utterly impossible for anyone who seeks to find out its meaning to trace from beginning to end a connected meaning in this formula. Most of the links of the chain, taken separately, admit of a passable interpretation ; many arrange themselves also in groups together, and their articulation may be said to be not incomprehensible ; but between these groups there remain contradictions and impossibilities in the consecutive arrangement of priority and sequence, which an exact exegesis has not the power, and is not permitted, to clear up.” R. S. Coplestone, Bishop of Colombo and President of the Ceylon Branch of the Royal Asiatic Society, in his book *Buddhism*, which has just appeared, also gives up the problem in despair, saying (p. 122) “Who will attack a metaphysical puzzle which he [Prof. Oldenberg] declares insoluble?”

Now a great deal of the difficulty experienced by these scholars appears to me to arise from the too strict way in which they use the

word "cause," and from the idea which they labor under that Time plays an important part here, whereas it would appear to have but a secondary rôle.

The term "cause" should be used in a very loose and flexible way, and in different senses, in discussing different members of this series. The native phrase of which Chain of Causation is supposed to be a translation is *paṭicca-samuppāda*.* *Paṭicca* is a gerund, equivalent to the Sanskrit *pratītya*, from the verbal root *i* 'go,' with the prefix *prati* 'back;' and *samuppāda* stands for the Sanskrit *samutpāda*, meaning 'a springing up.' Therefore the whole phrase means 'a springing up [into existence] with reference to something else,' or, as I would render it, 'origination by dependence.' The word "chain" is a gratuitous addition, the Buddhist calling it a wheel, and making Ignorance depend on Old Age etc. Now it is to be noted that, if a thing springs up—that is to say, comes into being—with reference to something else, or in dependence on something else, that dependence by no means needs to be a causal one. In the Pāli, each of these members of the so-called Chain of Causation is said to be the *paccaya* of the one next following, and *paccaya* is rendered 'cause.' But Buddhaghosa, in the Visuddhi-Magga, enumerates twenty-four different kinds of *paccaya*, and, in discussing each member of the *paṭicca-samuppāda*, states in which of these senses it is a *paccaya* of the succeeding one.

The Pāli texts very well express the general relation meant to be conveyed by the word *paccaya* when they say "If this one [member of the series] is not, then this [next following] one is not."

I will now run over the Chain of Causation, member by member, in reverse order, giving my own explanation of the relation of each member to the one before it, and show how comprehensible become the relations of the different members to each other if the term "cause" be used in a more flexible manner, and if Time be considered as only incidentally involved. I begin, then, with the bottom of the series.

Old Age etc. are said to depend on Birth. The relation here between Birth and Old Age etc. is that which we should express by the term "antecedent condition." The fact that I am born as a man or human being does not make me necessarily arrive at Old Age; yet, as the natives say, if there were no Birth, there would be no Old Age etc.

Birth is then said to depend on Existence. Now by Existence is meant existence in general, not this or that particular existence, but all existence whatsoever to which transmigration renders us liable. The relation, therefore, of Birth to Existence is simply that of a particular instance to a general category.

Next, Existence is said to be dependent on Attachment, and Attachment in its turn on Desire. I group together these two members of the series, as they mean much the same thing, Desire being the more general term, and the four divisions of Attachment are four classes of

* See R. C. Childers, Pāli Dictionary, p. 359; the same, in Colebrooke's Essays, i. 453; Böhtlingk and Roth, vii. 723, and the references to Burnouf there given.

Desire considered in the light of tendencies. Existence, therefore, is said to depend on Desire. Of this Desire it is said : "Where anything is delightful and agreeable to men, there Desire springs up and grows, there it settles and takes root :—" that is to say, all pleasurable objects to which we cling become so much food to create and perpetuate our being. It may seem strange to put Desire and Attachment before Existence, but the existence here meant is sentient existence, and the assertion is that, wherever Desire and Attachment develop themselves, there *ipso facto* we have sentient existence. The relation, therefore, of Existence and Desire or Attachment is that of effect to cause, and that of Attachment to Desire is identity.

The statement that Desire depends on Sensation hardly requires any special elucidation. In order that we should have Desire, there must be objects of Desire—that is to say, pleasurable sensations. Thus Sensation is the necessary antecedent or condition of Desire.

Sensation is said to depend on Contact. Contact means the contact of the organ of sense with the object of sense. The Buddhist explanation of vision, for instance, is that the eye and the form or object seen come into collision, and that from this contact results the sensation of sight. The relation, therefore, of Contact and Sensation is that of cause and effect.

Contact is said to depend on the Organs of Sense. This statement hardly requires any comment, for, of course, if there were no eye, there would be no eye-contact and resultant vision. The Organs of Sense are, therefore, the necessary antecedent conditions of contact.

The Organs of Sense are said to depend on Name-and-Form. By Form is meant the body, and by Name certain mental constituents of being. It is therefore perfectly natural to say that the Organs of Sense depend on Name-and-Form, for the organs of the five senses are, of course, part of the body ; and, as the Buddhists hold that there is a sixth sense, namely the mind, having ideas for its objects, this is naturally dependent on Name. Name-and-Form are therefore the material cause of the Organs of Sense. (I connect Name-and-Form with hyphens, as in Pāli they are usually compounded into one word, and declined in the singular.)

Name-and-Form depend on Consciousness, or better, perhaps, on the Consciousnesses. There are many different Consciousnesses : those belonging to the organs of sense, the eye-consciousness or sight, the ear-consciousness or hearing, etc., and many more besides, such as the Consciousness connected with the Trances. Now these Consciousnesses and Name-and-Form constitute the entire human being. Without these consciousnesses Name-and-Form would be lifeless ; and, again, without Name-and-Form the Consciousnesses would not be possible. Therefore the Consciousnesses and Name-and-Form are interdependent, neither of them being able to exist independently—that is to say, in the case of the human being.

The Consciousnesses depend on the *saṃkhāras* or *karma*. *Saṃkhāra* and *karma* are much the same thing ; *karma* is from the root *kar*, and

means 'deed' or 'act'; and *saṃkhāra* is from the same root, and means 'doing' or 'action.' This *karma* may be good, bad, or indifferent, and performed by the body, voice, or mind; but Buddhaghosa says they can all, in the last analysis, be reduced to thoughts or mental activity. Any dwelling of the mind on an object is a *saṃkhāra*, and the Consciousnesses result from such *saṃkhāras*. All the *saṃkhāras* are really also consciousnesses, but some thirty-two are marked off as the results of the others, and called *vipāka-viññāṇas* 'resultant consciousnesses.' Thus the relation of these thirty-two consciousnesses to the others called *saṃkhāras* is that of effect to cause.

The *saṃkhāras* are said to depend on Ignorance, and by Ignorance is meant the want of knowledge of the evil nature of all things. So long as we remain ignorant of the unsatisfactoriness of all objects of sense, we continue to occupy our mind with them—that is to say, we continue to perform *karma*. Ignorance, then, is the antecedent condition of the *saṃkhāras*.

I have thus gone over the Chain of Causation, and shown how variously the members of the series depend on each other, and that only in three instances was this dependence efficient cause.

My readers will also please notice that I have not assigned one part of the series to one point of time, say to one existence, and then the subsequent part to the following existence—the reason being that I consider the accounting for re-birth only a special application of this formula. For instance, some of the Consciousnesses may depend on the *saṃkhāras* of a former birth; others (e. g., those of the Trances), on *saṃkhāras* of the present one; also the Existence which depends on Desire and Attachment may be a renewed existence, or it may be such an existence as is given temporarily by the Trances (i. e., existence in the realm of Form by the four lower Trances, or in the realm of Formlessness by the four next above).

The Chain of Causation would thus appear in some sort to repeat itself, the assertion that Existence depends on Desire and Attachment being the more general statement of how all existence originates; while the description of the Consciousnesses evolving from the *saṃkhāras*, and, in the case of re-birth, embodying themselves in Name-and-Form, is the specific one of how the human being comes about.

8. The *Parīṣṭas* of the *Atharva-veda*; by Dr. Edwin W. Fay, University of Texas, Austin, Texas.

Dr. Fay has at present the use of the two manuscripts, A and B, described by Dr. Magoun, *Āsuri-Kalpa*, in the *Am. Journal of Philology*, 1889, x. 165 ff. Codex A is a clean MS. of 217 leaves, or of 434 pages, each of nine lines. Twelve *Parīṣṭas*, covering thirty-five pages, or about a twelfth part of this material, have been already copied and collated by Dr. Fay. The text and translation of the first six have been completed, and the text has been settled for several *Parīṣṭas* more. It is believed that a tolerably complete and satisfactory text can be arrived at from the two MSS. now in hand, even without other manu-

script material. Many repetitions of details occur within the compass already surveyed. The separate *Parīṣṭas* are wont to present two treatments of the same ceremonial, one in prose, the other in *śloka*s. For this reason, it will often be possible to get the general sense of a passage, even when the determination of the precise text-reading offers insuperable difficulties.

After all, it is only the general sense of the *Parīṣṭas* that may fairly claim the attention of Orientalists. They present very little of linguistic interest, apart from occasional new words, and the authentication of words marked by Boehtlingk as not quotable. But it should be added that, for students of folk-lore, ready access to this large collection of ritualistic and witchcraft practices is highly desirable.

Dr. Fay thinks that within the next two years he can finish the work of editing all these *Parīṣṭas*, as aforesaid. It is, nevertheless, very much to be wished that additional MSS. might be put at his disposal. And he would accordingly ask the Sanskritists of India and Europe to inform him (through the Secretary of the American Oriental Society, Cambridge, Massachusetts), of any such MSS. as might be entrusted to the Society for his use.

9. Emendation of *Kathā-sarit-sāgara* iii. 37 ; by Professor C. R. Lanman, of Harvard University, Cambridge, Mass.

In the third *Taraṅga* of the *Kathā-sarit-sāgara*, three brothers (verse 6) marry Bhojika's three daughters (10). A famine arises and the husbands flee (11). The sisters dwell with Bhojika's friend, Yajñadatta (13), and the second sister bears a son, Putraka, who, as protégé of Īva, attains in time to fabulous wealth and to kingship (24). On the advice of Yajñadatta (35), Putraka bestows unprecedented largess ; on hearing the news of which, his father and uncles return, and (36) are most handsomely treated. Then comes (37) one of the frequently interjected sententious reflections of Somadeva :

*āccaryam aparitṛyāḥ dṛṣṭanaśṭāpadām api
avivēkāndhabuddhīnām svānubhāvo durātmanām.*

In course of time, continues the poet (39), they lusted for royal power and strove to slay Putraka, etc. etc.

In the edition of Brockhaus (1839), the couplet reads as I give it ; and so in the edition of Durgāprasād and Parab (Bombay, 1889). Brockhaus, in his translation, p. 9, ignores the couplet entirely. In 1855, Boehtlingk and Roth set up for *anubhāva* the meaning "3. Gesinnung, Denkungsart (?)," but merely for the sake of this one passage. Thus *sva-anubhāva* (*sva* = 'own') would amount to nearly the same thing as *sva-bhāva*. And so Tawney appears to take it in his translation, i. 13.

In 1875, however, Boehtlingk and Roth, again for the sake of this sole passage, insert in the *Lexicon* the compound *sva-anubhāva*, and render it by "Genuss an Besitz (*sva*), Sinn für Besitz," and direct the reader to cancel the meaning and the citation under *anubhāva* 3. And in 1879 Boehtlingk gives the same view in the minor *Lexicon*. Accord-

ingly, we should translate : 'Strange to say, wicked men, even after they have got into misfortune and out again, cannot (so blind are their minds for lack of judgment) give up their enjoyment of property (or taste for property, or interest in property).' This, although not entirely inapposite, is not very pat.

I suspect that Somadeva wrote the line as follows :

avivekāndhabuddhīnām svabhāvaḥ sudurātmanām.

Copyist A left out *su-*; he, or his corrector, placed *su-* in the margin; copyist B put it back from the margin into the text, but in the wrong place, thus, *sva-su-bhāvo durātmanām*; for the senseless *svāsu-*, copyist C substituted what in nāgarī letters looks very nearly like it, namely *svānu-*. Thus arose the corruption.

The reading *svabhāvaḥ*, 'own nature,' yields just the sense we want, and fits the metre. For the combination *sudur-*, compare *duḥ-sparṣa* (opposite of *su-sparṣa*) with *su-duḥsparṣa*, and the like.

10. On the *ἀπ. λεγ. rujānāḥ*, RV. i. 32. 6, with a note on haplogy; by Prof. M. Bloomfield, of Johns Hopkins University, Baltimore, Md.

The hymn containing the word *rujānāḥ* is one of the most prominent of the large class which describe the conflict of Indra and the demon of the cloud, Vṛtra. The passage in question, RV. i. 32. 6 c, d, reads :

*nā 'tārīd asya sāmṛtiḥ vadhānām
sām rujānāḥ pīpiṣa indraçatruḥ.*

'(Vṛtra) has not survived the blow of his (Indra's) weapons, etc.' The fourth pāda is rendered by Grassmann : "im Sturz zerbrach der Indrafeind die Klüfte;" Ludwig translates "die gebrochenen burgen zermalnte er (selber noch im sturze) des feind gott Indra." Both translators ignore the native treatment of the word. In Yāska's Nāighaṇṭuka i. 13 = Kāutsavaya 30,* it occurs in a list of words for 'river,' and in Yāska's Nirukta vi. 4 we have, more explicitly, *rujānā nadyo bhavanti rujanti kulāni* 'the *rujānāḥ* are rivers; they break (*ruj*) the banks.' This purely etymological rendering is adopted by Sāyaṇa : *indreṇa hato nadīṣu patitaḥ san . . . vṛtradehasya pātena nadīnām kulāni tatradyapāṣāṇādikaḥ cūrṇibhūtam*. Even at the time of the present arrangement of the *naighaṇṭuka* there must have been some perplexity, for the word occurs a second time in Nāigh. iv. 3, in one of those lists which even in Yāska's time stood in need of especial elucidation. And Mādḥava, in explaining the parallel passage at TB. ii. 5. 4. 4, renders quite differently : *bhaṅgam prāpnuvantīḥ svakīyā eva senāḥ . . . vajreṇa hato bhūmāu patan san samīpavartinaḥ sarvān cūrān cūrṇīkṛtavān* 'his own armies while they are perishing, all the heroes standing near, (Vṛtra) slain by the bolt, falling upon the ground, has

* See the writer in P.A.O.S., Oct. 1890; Journal, vol. xv. p. xlviii.

† Cf. under Pāṇini ii. 3. 54: *nadī kulāni rujati*.

ground to pieces;' here *rujānāḥ* is explained by *bhaṅgam prāpnuvantīḥ* . . . *senāḥ*, in a manner totally different from the Nirukta. But all these translations are certainly incorrect, because they make *rujānāḥ* an accusative dependent upon *sām pipiṣe*, which is thus forced to assume the function of a middle with active value. Every occurrence of the word in the Rig-Veda and the Atharva-Veda, and, so far as is known, every Vedic occurrence of the word, goes to show that the middle does not occur with active value; only the active occurs: see especially Grassmann's Lexicon and Whitney's *Index Verborum*. Thus *sām pipiṣa indraçatruḥ* cannot mean anything else but 'he who had Indra as his enemy was crushed.' This grammatical consideration is supported to perfection by the facts otherwise known in the case: Vṛtra never crushes anything; on the other hand, *sām piṣ* is used especially of Indra, and most frequently when he crushes cloud-demons: e. g. RV. iii. 18. 9, *çiro dāsasya sām piṇak*; iii. 30. 8, *ahastām indra sām piṇak kūṇārum*; iv. 30. 13, *pūro yād asya* (sc. *çuṣṇasya*) *sam-piṇak*; vi. 17. 10, *yéna návantam áhiḥ sampiṇak*; viii. 1. 28, *tvám pūraṁ* . . . *çuṣṇasya sām piṇak*. One may say that but for the presence of *rujānāḥ* in the pāda no one would have ever thought of regarding *sām pipiṣe* as an active. We are thus constrained to search in *rujānāḥ* for a nom. sg. in agreement with the subject of the sentence.

Another point strongly claims recognition. The root *ruj*, simple as well as with various prepositions, figures very prominently in descriptions of the injuries which Indra inflicts upon demons, and it seems very natural to suppose that the word *rujānāḥ* here states that such injury was inflicted upon Vṛtra by Indra. Thus RV. x. 89. 6, 7, (*indraḥ*) *çṛṇāti viḍu rujāti sthirāni* . . . *jaghāna vrtrām* . . . *rurōja pūraḥ*: cf. also i. 6. 5; 51. 5; iv. 32. 10; vi. 32. 3; ix. 48. 2. Very similar are RV. viii. 6. 13, *vi vrtrām parvaço rujān*; i. 59. 6, *vi vrtrāsya* . . . *paṣyā* 'rujaḥ'; x. 152. 3 = AV. i. 21. 3 = SV. ii. 1217; also TS. i. 6. 12. 5. *vi vrtrāsya hānū ruja*. Elsewhere Vala is treated in the same way: e. g. RV. iv. 50. 5, *vālaḥ ruroja*; RV. vi. 39. 2, *rujád* . . . *vi vālasya sānum*; AV. xix. 28. 3, *hṛdāḥ sapātnānām bhindhī 'ndra iva virujān valām*. At RV. x. 49. 6, *sām* . . . *dāsam vrtrahā* 'rujam, and AV. iv. 24. 2, *yó* (sc. *indro*) *dānavānām bālam ārurōja*, the same theme is treated. At RV. vi. 22. 6, the words *rūjo vi āṛdhā* express essentially the same thing, the cleaving of the clouds: cf. also vii. 75. 7; viii. 45. 13; ix. 34. 1. At RV. vi. 32. 2 we have *rujád ádrim* (cf. i. 72. 2); at RV. vi. 61. 2, *arujat sānu girīṇām*. Again, of Indra it is said at RV. x. 84. 3, *rujān* . . . *çātrūn*; at RV. i. 102. 4 = AV. vii. 50. 4, *prā çātrūnām maghavan vr'ṣṇyā ruja*. Every additional example strengthens the impression that *rujānāḥ* originally stood in agreement with *indraçatruḥ*, the subject of the sentence, and we are at once led to the emendation *rujānāḥ* 'broken' in the sense of a passive: cf. Delbrück, *Altindische Syntax*, p. 264. But why should the correctly accented and easily intelligible *rujānāḥ* have given way to this discordant *lectio difficillima* with anomalous accent? The sense, too, is tautological in the extreme: 'Vṛtra having been broken was crushed'.

The suggestion which we have to offer is uncertain, and, but for the fact that its rejection does not deprive the negative analysis of the passage of its value, it might perhaps not have been offered in print. The root *ruj* is employed very frequently in connection with parts of the body. Thus we have above the expressions *vi vrtrāsya hānū ruja*; *vi vrtrām parvaṣo rujān*; *rujad . . . vi vālasya sānum*. In a different connection we have AV. ix. 8. 13, figuratively, *yāh śimānam virujānti mūrdhānam prāty arṣaṇīh* 'the pains which break the crown of the head and the head'; AV. ix. 8. 18, *yāh . . . pārūṇṣi virujānti*; ÇB. iv. 5. 2. 3, *virujya çronī*. At Rām. iii. 72. 20 we have *pakṣaṭuṇḍa-nakhāih . . . gātrāṇy ārujatā*; at Har. 5694, *stanān ārujya*. With this use are related the very common expressions like *mukha-ruj* 'pain in the mouth,' Varāh. Br. S. 5. 82; *dṛg-ruj*, ibid. 104. 5; *aksi-ruj*, ibid. 51. 11; 104. 16; *netra-ruj*, AK. iii. 4. 26. 203, 'pain in the eyes'; *pārçva-ruj*, Suçr. i. 165. 9, 'pain in the side'; *lalāṭe ca rujā jajñe*, Rām. iii. 29. 15; *çiro-ruj*, Varāh. Br. S. 53. 111; *çiro-rujā*, MBh. iii. 16829; *çiraso rujā*, ibid. 16816.

My suggestion, now, is that *rujānāh* is a compound of a derivative of the root *ruj* with some designation of a part of the body. It might be = *rujānā* + *ās* 'having a broken mouth;' but it seems to me more likely to be *rujānā* + *nās* 'nose,' which would yield *rujānānās*, changed by dissimilation (haplology) to *rujānās*.* The word would then mean 'with broken nose.' In stanza 7 of the same hymn the statement is made that Vṛtra was broken into many small pieces: *purutrā vrtrō açayad vyāstah*; which augurs that his nose was not exempt from the general catastrophe. This, at any rate, yields good sense, and accounts for the anomalous (*bahuvrīhi*) accentuation. The stem *nās* 'nose' does not occur out of composition, but it seems to be fairly certain in *anās*, RV. v. 29. 10: *anāso dāsyūnr amṛṇo vadhēna*. The padapāṭha divides *an-āso*, and both the Petersburg lexicons and Grassmann follow, translating the word by 'without face or mouth.' Ludwig, *Rig-Veda* ii. 109, translates 'with your weapon you slew the noseless Dasyu,' having in mind the flat-nosed aborigines. Cf. also his remarks in the notes, vol. v., p. 95. The same interpretation was advanced previously by Max Müller: see Ad. Kuhn, *Die Herabkunft des Feuers*, p. 59, note. Especially on the second assumption (*rujānāh* = *rujānānāh*) it is easy to understand how the composite character of the word might have been forgotten, and the earliest interpreters driven to propositions entirely out of accord with the rest of the sentence and with reasonable sense.

Note on Haplology.

Cases of haplology are by no means so rare in the older language as would appear from the very few instances which are usually reported.

* See the note on haplology at the end of this article. A *bahuvrīhi* with a participle in *-na* as the first member we have in *dadrçānā-pavi*, *yuyujānā-sapti* (Whitney, Sk. Gr.² § 1299c): cf. also *uttānā-hasta*, *uttānā-pad*. The participle *rujānā* is to be regarded as belonging to the root-aorist: cf. ib. 840, 6.

Whitney, Sk. Gr.² § 1021b, mentions *irádhyāi* for **iradh-dāhyāi*, and this is the sole example in illustration of the process mentioned by Brugmann, *Grundriss der vergleichenden Grammatik*, i. 484. Other examples, in addition to *uloká* for **ulu-loka* from *uru-loká* (see below), are : *madūgha* 'sweet-wood, licorice,' for **madhu-dugha*, **madhugha*, with loss of aspiration, both intermediate forms being found occasionally in the MSS. : see e. g. Kāuṣ. 35. 21, note 9 ; *trēdā* and *trica* for **try-rea* 'a group of three stanzas' (so already Yāska, Nir. iii. 1) ; *hiraṇ-māya* for **hiraṇya-maya* 'golden,' where the loss of the first *ya* by dissimilation operates across the syllable *ma* ; *ṣuṣmayā* for **ṣuṣma-maya*, TS. ii. 2. 12. 4, 'fiery,' which the Petersburg lexicon erroneously regards as the corruption of a theoretical **ṣuṣmya* ; *śévr̥dha* for **śeva-vṛdha* 'kindly, friendly' (Grassmann) ; *sādas-pāti* for **sādasaspāti* 'protector of home': compounds with *pāti* having two accents regularly exhibit a genitive as the first member : *ṣubhās-pāti*, *bṛhas-pāti*, *brāhmaṇas-pāti*, and by imitation *vānas-pāti*, *jās-pāti*, *rāthas-pāti* ; *ṣṛṣakti* 'head-ache' may stand for *ṣṛṣa-sakti* 'affection of the head' from root *sac* in the sense of 'fasten upon' : cf. AV. i. 12. 3, where *ṣṛṣakti* and *sac* occur together alliteratively. The last example is by no means certain. There is correlation, surely, between this phenomenon and the gliding over of causatives like *kṣayayāmi*, etc., to the *p*-type : *kṣapayāmi* etc. : cf. also the change of *rohāyāmi* of the *mantras* to *ropāyāmi* in the Brāhmaṇas.

11. The etymology of *uloká* ; by Professor Bloomfield.

The various essays on this expression are instructive alike for the keen philological insight and the inadequate grammatical propositions of their authors. The expression is distinctively an archaism in the literature. In the first eight maṇḍalas of the RV., the word *loká* occurs only twice without the *u* preceding : vi. 47. 8 ; viii. 100. 12.* With antecedent *u*, the occurrences are i. 93. 6 ; ii. 30. 6 ; iii. 2. 9 ; 29. 8 ; 37. 11 ; iv. 17. 17 ; v. 1. 6 ; 4. 11 ; vi. 23. 3 ; 73. 2 ; vii. 20. 2 ; 35. 5 ; 60. 9 ; 84. 2 ; 99. 4 ; viii. 15. 4 (here *u loka-kṛtnūm*). In the ninth book, there are two occurrences of simple *loká*, ix. 113. 7, 9 ; and three of *u loká*, ix. 2. 8 (*u loka-kṛtnūm*) ; 86. 21 (*u loka-kṛt*) ; 92. 5 (*u lokám*). In the tenth book, there are six occurrences of *u loká* : x. 13. 2 ; 16. 4 ; 30. 7 ; 104. 10 ; 133. 1 (*u loka-kṛt*) ; 180. 3 ; and three occurrences of simple *loká* : x. 14. 9 ; 85. 27 ; 90. 14. In addition, the tenth book, and that alone, begins to produce compounds in which *loká* is the final member : *urúlokam*, in x. 128. 2 ; *jīvalokám*, in x. 18. 8 ; and *patilokám*, in x. 85. 43. This shows on the whole a perceptible growth of *loká* at the expense of *u loká* in the ninth and tenth books ; and the AV. continues boldly in

* Correct accordingly Bollensen in ZDMG. xxiii. 607, who claims that there is no occurrence of *loká* without preceding *u* in the first eight books ; and Max Müller, *Vedic Hymns* (SBE. xxxii), p. lxxv, who notes only viii. 100. 12.

the same direction. Here *loká* occurs so often as to render a count useless, but *u loká* occurs only three times, in one hymn of the Yama-book, xviii. 4. 11, 44, 71, in the obviously archaizing phrase *sukṛ'tām u lokám*. I do not count three other occurrences which coincide with the RV., namely vii. 84. 2=RV. x. 180. 3; xviii. 2. 8=RV. x. 16. 4; xviii. 3. 38=RV. x. 13. 2. The AV. abounds also in compounds in which *loka* forms the second member; see *Index Verborum*, p. 257a. In the Yajus-texts, both *u loká* and *loká* occur; but we have no means of controlling their frequency or proportion. We have *surabhā u loká* in VS. xii. 35=TS. iv. 2. 3. 2=MS. ii. 7. 10;* *sukṛ'tām u lokám* in VS. xviii. 52=TS. iv. 7. 13. 1=MS. ii. 12. 3; and in VS. xviii. 58. The parallel of VS. xviii. 58 in TS. v. 7. 7. 1 has *sukṛ'tasya lokám* instead of *sukṛ'tām u lokám*. That is precisely the favorite manner in which the AV. manages to circumvent the archaism: see e. g. iv. 11. 6; 14.6; vi. 119. 1; 120. 1; 121. 1, 2; vii. 83. 4; xi. 1. 8, 37, etc. In VS. xi. 22=MS. ii. 7. 2 occurs the pāda *ākaḥ sū lokám súkṛtam prthivyaḥ*, which is varied in TS. iv. 1. 2. 4 to *ākaḥ sá lokám súkṛtam prthivyāḥ*. Both *sū* and *sá* are modern variants of *u*; and they testify that the combination *u loká* had become perplexing. It is to be noted also that the compound *lokakṛ't*, which is preceded by *u* in the two sole occurrences in the RV. (ix. 86. 21; x. 133. 1), occurs in other texts always without *u*: AV. xviii. 3. 25; TS. i. 1. 12. 1; TB. iii. 7. 2. 10; AÇS. iv. 13. 5.

Most Vedic scholars have recognized the unusual character of *u* before *loká*. In many cases it makes no sense; and in RV. iii. 2. 9; 37. 11; v. 4. 11; viii. 15. 4; ix. 2. 8, it stands at the beginning of a pāda, in defiance of the rule that enclitics cannot stand at the beginning of any verse-line.† There is no connection from which *u loká*, regarded as two words, could have been propagated secondarily;‡ hence all the interpreters have agreed in assuming *uloká* as a single word, misunderstood by the padapāṭha and the Prātiçākhyā of the RV., owing to the occurrence of *loká* in the same text.

Adalbert Kuhn, in *Ind. Stud.* i. 350 ff., after comparing *loká* with Lith. and Old Pruss. *laukas*, Lettish *lauko*, all meaning 'open space, field,' Low Germ. *louch*, *lōch* 'village,' derives the words from Skt. *urú*, *ēpā-s*, and sees in the *u* a trace of the fuller form of the stem, which was lost for reasons not stated. The Pet. Lex. suggests that the word is a derivative from the root *ruc* 'shine,' preceded by a preposition *u*, a reduced form of *ava*. Bollensen, ZDMG. xviii. 607 ff., xxii. 580, derives it from an adjective **urv-añc*, through the weak stem **urv-ac*, extended into an *a*-stem **urvaka*, **uroka*. Ascoli, *Corsi di glottologia*,

* The same expression occurs in RV. v. 1. 6.

† Hence the RV. Prātiçākhyā (978), which, like the padapāṭha, regards *u* in these cases as the particle, is led to insert a special provision exempting *u* from the law of enclitics; *anudāttam tu pādādāu novarjam vidyate padam*, 'no unaccented word is found at the beginning of a pāda except *u*.'

‡ A somewhat mechanical propagation of the particle *u* must be assumed for its persistent occurrence after infinitives in *-tavā'i* (*-tavā' u*).

p. 236 (German translation p. 195), Fick, *Vergleichendes Wörterbuch* (all editions), and Joh. Schmidt, *Vocalismus*, ii. 220, assume a phonetic development of *u* out of the initial *l*. Grassmann modifies the view of the Pet. Lex. by assuming a reduplicated stem **ruroka* which lost the *r* of the reduplicating syllable.

The germ of what seems to me the true explanation is contained in Kuhn's view : there is some connection between *uloká* and the word *urú*. I assume a simple stem *loká*, and a descriptive compound *uru-loká*, changed by assimilation of the linguals to **ululoká†* and by haplology to *uloká*. Naturally, after the loss of one of the syllables, the origin of the word was forgotten, and the padakāra, perplexed by the existence of the simple word *loká*, construed *u* as the particle.

The Vedic poets themselves had lost all knowledge of the composite character of the word ; but the expression *uloká* clearly betrays its elective affinity for the word *urú*, which frequently occurs as its predicate : e. g. RV. i. 93. 6 ; vi. 23. 7 ; vii. 33. 5 ; 60. 9 ; 84. 2 ; 99. 4 ; x. 180. 3. The case is therefore one of the unconscious doubling of equivalent linguistic elements ; the first *uru* having been exhausted by its phonetic fate, a second *uru* is put into requisition ; its fitness as a predicate of *loká* (*uloká*) has not passed by.‡ But there appears to be a certain shyness in putting *urú* near *uloká* ; in all cases where the two occur together, *urú* stands at the beginning and *uloká* at the end of the pāda : e. g. i. 93. 6, *urúm yajñāya cakrathur u lokám*. So also vi. 23. 7 ; vii. 35. 5 ; 60. 9 ; 84. 2 ; 99. 4 ; x. 180. 3.

The occurrence of the ἀπ. λεγ. *urúloka* in RV. x. 128. 2 = AV. v. 3. 3 = TS. iv. 7. 14. 1, does not stand in the way of the assumed phonetic process. In the first place, the word occurs in the tenth book, and we may assume that the phonetic law had ceased to operate. Further, the cases are not the same : **uruloká* changed to *uloká* is a karmadhāraya, and accordingly oxytone ; *urúloka* is a bahuvrīhi in both function and accentuation. It is quite likely that the identical grave intonation of the two similar first syllables in *uruloká* favored a process of dissimilation uncalled for by the two initial syllables of *urúlokam*, contrasted as they were by accent and perhaps also by syllabification (*ur-ul-o-ká*, but *u-rú-lo-ka*). But there seems to be also a chronological difference ;

† Cf. Bechtel, *Ueber gegenseitige Assimilation und Dissimilation der beiden Zitterlaute*, pp. 45 ff. Aufrecht's essentially similar view, ZDMG. xlii. 152, did not come to my notice until the present article was in type. Perhaps the totally independent arrival of both of us at the same result may impart an element of security to the construction.

‡ Cf. cases like Vedic *pr̥tsúsu* 'in battles,' with double loc. plur. ending *su*. This is rendered natural by a compound like *pr̥tsutúr*, where *pr̥tsu* may have been felt as a stem-form. Similarly *patsu-tás* 'at the feet' and *patsutah-çī* 'lying at the feet;' comparatives and superlatives like *çréṣṭhatama*, *nēdis-ṭhatama* ; Pāli *abhiruyhitvā* for **abhiruyhitva* = Skt. *abhiruhya*, *ogayhivā* for **ogayha* = *aragāhya*, etc. See E. Kuhn, *Pali-grammatik*, p. 120.

since the AV., though it does not directly compound *urú* and *loká*, places them closely together, e. g. ix. 2. 11, *urúm lokám akaram máh-yam edhatum*; xii. 1. 1, *urúm lokám prthiví nah kṛnotu*; see also xiv. 1. 58; xviii. 2. 20. The RV., as indicated above, avoids this, and exhibits in its place six occurrences of the type *urúm . . . ulokám*, e. g. vii. 84. 2. *urúm na índraḥ kṛṇavad u lokám*. Each expression is typical for the text from which it is quoted.

12. The doctrine of the resurrection among the Ancient Persians; by Professor A. V. Williams Jackson, of Columbia College, New York City.

This paper was presented in abstract. The main points of its discussion, however, may briefly be given; and the most important passages from which citations were drawn are perhaps worth recording for future reference, if the paper be printed elsewhere in full.

Attention was first called to various likenesses and resemblances in general between the religion of Ancient Iran, as modified by Zoroaster, and the doctrines of Christianity. The most striking among these parallels are those to be found in the views relating to eschatology and the doctrine of a future life. It is the optimistic hope of a regeneration of the world and of a general resurrection of the dead that most markedly characterizes the religion of Persia from the earliest times. The pious expectation of a new order of things is the chord upon which Zoroaster himself rings constant changes in the Gāthās or 'Psalms.' A mighty crisis is impending (Ys. xxx. 2, *mazé yāōnhō*); each man should choose the best, and seek for the ideal state; mankind shall then become perfect, and the world renovated (*frašem ahūm, frašōtema*: cf. *frašokereti*, etc.). This will be the establishment of the power and dominion of good over evil, the beginning of the true rule and sovereignty, "the good kingdom, the wished-for kingdom" (*vohu khšathra, khšathra vairya*). It is then that the resurrection of the dead will take place. It will be followed by a general judgment, accompanied by the flood of molten metal in which the wicked shall be punished, the righteous cleansed, and evil banished from the world (cf. also A.O.S. Proceedings for Oct. 1890, Journal, vol. xv. p. lviii).

After this general introduction, various classical passages in Greek authors touching upon the ancient Persian belief were examined in the light of the Avesta. The citations were drawn from Theopompus, quoted by Diogenes Laertes, *Proœmium* p. 2, ed. Müller, *Fragmenta Historicorum Græcorum* i. 289, and again by Æneas of Gaza, *Dial. de animi immort.* p. 77, both cited by Windischmann, *Zoroastrische Studien* p. 233. The allusion in Plutarch (*Is. et Os.* 47) was discussed, and the interesting passage Herodotus 3. 62 was reconsidered. All these classical passages were found to be quite in keeping with the general results won from the Avesta.

A more detailed investigation of the Avesta and the Pahlavi books now followed in regard to the doctrine of a millenium, the coming of the Saoshyant 'Saviour,' the destruction of evil, the establishment of

the kingdom and sovereignty of good, and the renovation of the universe, all which are directly associated with the doctrine of the resurrection.

In connection with the idea of a coming millennium, a final change and regeneration of the world—a belief parallel in a measure with ideas found in the Revelation—such passages were discussed as Ys. xxx. 2; xxxiii. 5; xxxvi. 2; lviii. 7; li. 6; xliii. 5, 6; xxx. 9; xlvi. 19; l. 11: cf. Yt. xix. 11; Vd. xviii. 51; Ys. lxii. 3; Yt. xiii. 58, 128; and Ys. li. 9; xxx. 7; Vsp. xx. 1; Yt. 17. 20; together with numerous allusions in the later Pahlavi books, such as Bundahish i. 25; xxx. 1 ff.; xxxii. 8, *et al.* Some of the classical passages were again used in comparison.

A treatment of the doctrine of the idea of a Saviour, as directly connected with the resurrection belief, was next briefly given; certain parallels with the Messianic ideas of Judaism were drawn. Quotations used for discussion upon this point were made from Ys. xlvi. 3; xlviii. 9; Ys. xiv. 1; ix. 2; Yt. xiii. 128; xix. 89; Bund. xxx. 2 ff.; BYt. iii. 61; Dd. ii. 13, *et al.*, and a passage in a Syriac MS. commentary on the N. T. by 'Ishō'dād, as well as Apocryphal N. T., *Infancy*, iii. 1-10.

Finally, the resurrection passages Yt. xiii. 128; xix. 89-96; *Fragm.* iv. 1-3 were translated in full and commented upon. The latter fragment (iv. 1-3) appears in the Dīnkart ix. 46. 1-5 as taken from the Varshtmānsar Nask (cf. West, *Pahlavi Texts* transl. S. B. E. xxxvii. 302). A number of Pahlavi allusions were then instanced, occurrences of Phl. *tanū-ī pasin* 'the body hereafter' were treated, and an extended discussion was given of the well-known Bundahish passage xxx. 1-32, and of its relation to the ancient Dāmdāt Nask. Statements bearing upon the resurrection were also cited from the accounts given in the Dīnkart and the Persian Rivāyats, of the contents of the original Avestan Nasks or 'books,' to show that this doctrine must have been often referred to or discussed, and that it was evidently a prominent article of faith.

Having given a summary, and shown the perfect uniformity and accord between the Avesta, the Pahlavi Books, the old accounts of the original Nasks, and the early allusions in the classics, the paper came to the conclusion that the doctrine of the resurrection of the body is one of the oldest in the religion of Persia; that it may have been developed or even modified at different times; but that it was characteristic of Mazdaism in all its periods, so far as we can judge, and was a tenet undoubtedly inculcated by Zoroaster some centuries before the Christian era.

13. Sanskrit-Avestan Notes ; by Professor Jackson.

1. Skt. *gambhīrā*, *gabhīrā*, Av. *gufra*.

In *American Journal of Philology* xi. 89, 90, P. Horn of Strassburg has drawn attention to the possible existence of an occasional Avestan *u* or *ū* which answers to an *a*, or is the representative of the *nasalis sonans*. Dr. Horn has since somewhat questioned the correctness of his own suggestion; I think much may be said, however, in its favor.

The examples which Horn originally brought forward to support his theory were, it is true, by no means all sure; but a comparison with the Sanskrit seems to make, on this principle, the Avestan word *gufra* 'deep' quite clear. Presumably, Av. *gufra* stands for **gm̥f-ra*: cf. Av. *jaf-ra*. This can be none other than Skt. *gambh-ī-rā*, *gabh-ī-rā*. On -ī- see also Bartholomae *Studien z. indog. Sprachgeschichte* ii. 170, 179. A proportion may thus be constructed:

Av. *guf-ra*: Av.* *gm̥f-ra*, cf. *jaf-ra*: Skt. *gambh-ī-rā*:
Skt. *gm̥bh-ī-rā*, cf. *gabh-ī-rā*.

We have thus an Av. *u* representing *a*, *m̥*.

The writing *u* in Av. may indeed not be truly orthographic; the variants at Yt. xv. 28 for the similar word *guf-ya*, *gaf-ya* would seem to show that fact; but that such a *u* does occur in Av. for *m̥*, *a*, seems unquestionable, and an acceptance of Horn's suggestion may perhaps clear up other words.

2. Skt. *achāyā*, RV. x. 27. 14, and Av. *asaya*, Yasna lvii. 27.

In the Avesta, Ys. lvii. 27, the divine horses of Sraosha are thus described:

yim cathwārō aurvañtō
auruša raokhšna frāderesra
speñta vīdhvāoiñhō asaya
mainivasaiñhō vszeñti

'Four white steeds, bright, shining, sacred, knowing, and . . . , bear Sraosha through the heavenly space.'

The epithet *asaya*, left untranslated, is obscure. Dr. E. W. West, under date Dec. 5, 1888, wrote me that the Pahlavi version of the word seems to contain *sāyako*, with which he compared Mod. Pers. سایه 'shadow.' The hint was an excellent one; *asaya* might well mean 'not casting a shadow.'

Turning now to the Sanskrit, we find a precise parallel in the word *a-chāyā* 'shadowless' in a passage of the Rig-Veda, x. 27. 14: *bṛhānn ach āyō' apalāṣō' ārvā*. The meaning at once becomes clear, and the forms match exactly. For the phonetic changes (Skt. *ā* = Av. *ā*; Skt. *ch* = Av. *s*), see my *Avesta Grammar*, §§ 17, 142.

With reference, moreover, to the force of the attribute 'shadowless' Professor Geldner has happily suggested a parallel in the familiar epithet *chāyādvīṭiya* 'accompanied by a shadow,' the characteristic mark distinguishing Nala from the gods in the well-known episode MBh. iii. 57. 25. A further support, I think, may also be brought in from a passage in the classics. Plutarch, in *Is. et Os.* 47, describes the millennium which the Zoroastrian religion pictures as coming upon earth at the end of the world; in this connection he notes as one of the characteristics of men beatified that they shall no longer 'cast a shadow': ἀνθρώπους εὐδαιμονας ἕσεσθαι, μήτε τροφῆς δεομένους μήτε σκιὰν ποιούντας. See also Windischmann, *Zor. Studien*, p. 234.

The epithets Skt. *achāyā*, Av. *asaya* are therefore quite parallel in signification; and the wonderful coursers of Sraosha, besides all their

other divine attributes, become 'shadowless' as they dart through the sky.*

3. Data for Zoroaster's Life.

In *P.A.O.S.* for April, 1892 (Journal, vol. xv., p. clxxx), attention was called to the Zartusht-Nāmah as possibly furnishing a number of old traditional facts connected with the actual life of Zoroaster. Mention was made, for example, of Zoroaster's reputed teacher Barzīnkarūs. Possibly that name may rest upon some good foundation. Allusion to a spiritual teacher (*aēthrapaiti*) of Zoroaster is at any rate now quotable from an ancient Avesta fragment of the Hādhōkht Nask, cited in *Sad Dar* xl. 4: see also *Dīnkart* viii. 45. 9. The Avesta text (emended) is thus given in West, *Pahlavi Texts transl.*, *S. B. E.* xxiv. 302; xxxvii. 483:

mā āzārayōiš, Zarathuštra! mā Pourušaspem mā Dughdhovām, mā aēthrapaitiš;

which may be rendered: 'Mayest thou, O Zoroaster, not anger thy father, Pourushaspa, nor thy mother, Dughdhova, nor thy spiritual teacher.' Might Barzīnkarūs be the very *aēthrapaiti* here alluded to? According to the Zartusht-Nāmah, Zoroaster was given into a learned teacher's charge at the age of seven years.

The passage cited is also especially interesting as it gives us an actual occurrence of the name of Zoroaster's mother in an Avesta text. Her name had previously been quotable only in Pahlavi and Persian writings. See, for instance, *Bd.* xxxii. 10; *Sl.* x. 4; xii. 11, and the reference in *A.O.S. Journal* xv. 228.

Items like this have their value as contributing something toward our knowledge of Zoroaster's life and the facts connected with him as a historical personage. It is for just such points as this that we must look to Pahlavi scholars to provide us with new material and data.

14. The independent particle *sū* in the Rig-veda; by Prof. Herbert C. Tolman, of the University of Wisconsin, Madison, Wis.

As an inseparable prefix, the particle *sū* is used, in all periods of the Sanskrit language, with the familiar meanings which flow naturally from its primary signification 'well.' On the other hand, as is well known, the Veda furnishes many examples of *sū* used as an independent word.

The German translators either omit the word entirely, believing it to be used simply as a metrical expletive, or else they render it by *schon*, which is a good German reproduction of the padding of the original, if padding it be. They also render it by *gut*, *recht*, *sehr*, *ja*, *recht bald*

* Since the above was written, I am interested in finding that Darmesteter, in his new translation, *Le Zend-Avesta*, vol. i. 366, assigns precisely the same meaning to *asaya*, 'sans faire d' ombre.' To have the support also of such authority is gratifying.

(Ludwig), *sogleich*; and *mā u śu* is rendered by *nimmer*: thus, for example, in RV. i. 38. 6, *mó śu ṇaḥ . . . nīrṣtir durhāṇā vadhāt*. But is not the meaning rather 'Kindly (*i. e.* please), O Maruts, let not destruction (and) disaster slay us'?

The particle *śu* occurs as a word in the first book of the Rig-veda in some forty-one passages, counting the refrain of i. 112. 1-23 as one. If we examine these passages, we shall find that the renderings 'kindly,' 'please,' 'be so good as to,' fit in all but eight. In these eight we can insist either *a.* on the simple adverbial meaning of the particle, or else *b.* that its force consists in representing the action of the verb as desirable.

Thus, as an example under *a.* may be cited i. 37. 14, *tátro śu mādayādhvāi*, 'so enjoy yourselves as their (the Kaṇvas': *tātra = kāṇveṣu*) guests, well or thoroughly: *i. e.* have a rousing good time with them.' And, as examples under *b.*: i. 136. 1, *prā śu j्येष्ठam nicirābhyām brhān nāmo . . bharatā*, 'proffer well (*i. e.* acceptably or so that it may be most acceptable) as your best offering to the two needful (gods) exalted homage;' i. 164. 26, *abhīddho gharmās tād u śu prā vocam*, 'the kettle is hot and I announce it (to you) acceptably: *i. e.* you'll be glad to hear me say so.*

But it is the meaning 'please' which I desire especially to emphasize, and which, I think, is the most appropriate in no less than twenty-three of the forty-one passages. In each case I render by 'be so good as to.' Thus, i. 9. 6, *asmān śu . . codaye 'ndra rāyē*, 'be so good, O Indra, as to help us on to prosperity;' i. 17. 7, *asmān śu jigyūṣas kṛtam*, 'be ye two so good as to make us victorious;' i. 26. 5, *imā u śu ṣrudhī girāḥ*, 'and be so good as to hear these (our) songs;' and similarly in the others, in which the verb is an imperative or its equivalent. And not essentially different is i. 118. 10, *tā vām narā sv āvase . . hāvāmahe*, 'therefore we call on you two, O heroes, to be so good as to help us.'

It seems to follow that the meaning 'please' or 'I pray' must be conceded for the detached *śu*. The logical development of the meanings presents no difficulty: thus, 'well, acceptably, kindly, we pray.' Moreover, there is in various languages a tendency to tone down the harshness of a direct command. In this way the Roman *noli facere* and *ne feceris* took the place of *ne fac*. And the use of *quominus* with verbs of hindering and so on was developed under the same tendency. In late Greek, παρακαλῶ was attached for a like purpose to the imperative, so that to-day in Athens it is the regular word for 'please.†

The functions of the detached *śu* in the Rig-veda I hold to be: 1, to soften a command ('please'); 2, to make acceptable a wish ('I pray');

* The other five passages are i. 135. 9; 184. 2; 52. 1; 53. 1; 139. 8. But it may be noted that in all these eight examples, save one, it is quite possible to apply the rendering 'please.'

† Δός μοι, παρακαλῶ, τὰς ἐλαίας, 'Please hand me the olives.' Compare the Latin *bene in nunc te opsecro ut me bene iuves*, Mostell. iv. 3. 41.

and 3, to modify the verb as a simple adverb ('well, agreeably'). Of the last use there are somewhat less than a dozen instances.

The particle, then, has a definite significance in every case of its occurrence, and ought not to be slighted by the translator. In most of the instances where the German versions attempt to render it, its sense is quite different from that of *schon*, *sogleich*, *wohl*, etc.

15. On early Moslem promissory notes; by Mr. Frank D. Chester, Assistant in Arabic in Harvard University, Cambridge, Mass.

In the Kitâb al-Aġânî (ed. Bulak, I, p. 17, l. 16), first-rate evidence is to be found that the Arabs of the time of Moâwiya, the first Damascus calif, had already excellent financial arrangements in private business transactions, particularly the custom of giving what we now call a "promise to pay" for money lent on specified terms. A tradition there reported from Moṣ'ab ibn 'Ammâr, a descendant of the famous Ibn az-Zubeir of Medina, relates that Sa'id, grandson of Umayya, before his death had instructed his son 'Amru to make over certain property to his cousin Moâwiya, in order to pay off the debts that had accumulated upon him during his lifetime. For it was the custom that near relatives should take upon themselves all indebtedness of the deceased. In this case, Sa'id desired that 'Amru should be able to offer the calif something that he might sell to advantage and incur no expense. Accordingly, Moâwiya accepted his relative's offer with the words "What* has he made over to me?" 'Amru replied "His castle in Al-'Arṣa." He said "I take it for his debt." He answered "It is yours on condition that you have the amount transported to Medina and converted into *wâfis*." He said "Ay," and had it transferred to Medina and divided among his creditors. "And the greater part,"

says the tradition, "consisted of promises to pay (وَكَانَ أَكْثَرُهَا عِدَاتٍ)." ¹

The Arabic word عِدَّة here used appears to have a technical sense, an illustration of which is afforded by the conclusion of Moṣ'ab's story, which runs thus:

A young man of the Kōreish came to him (viz. 'Amru, on his return to Medina) with a document (صَك) to the amount of twenty thousand dirhams with Sa'id's own signature and the signature of a freedman of his upon it. He sent for the freedman, and made him read the document. When he had read it, he wept and said "Ay, this is his writing, and this is my signature upon it." Then 'Amru said to him "How

* Read (عَلَيَّ) مَا عَرَضَ, not فَبَاعَرَضَ, which makes little sense: cf.

'Amru's reply.

comes there to be twenty thousand dirhams for this youth upon it? Why, he is the poorest of the poor of the Kōreish!" He said "I will tell you about it. Sa'id was passing along after his loss of office, and this youth happened on him, and journeyed with him till he arrived at his home. There he stopped and said 'Do you wish anything?' (The youth) said 'No, except that I found you traveling alone and desired to come to your protection.' Then he said to me 'Bring me a sheet of paper,' and I brought him this. He wrote out this debt himself, and said 'You shall not suffer anything at my hands; take this, and, when anything comes in to me, you come to me.'" 'Amru said "By Allah, he surely shall not receive it except in *wāfis*. Give it to him." And the twenty thousand dirhams were weighed out to him in *wāfis*!*

The legal point of this story is that Sa'id's great generosity led him to incur money obligations when he had no means to fulfil them. This fact really invalidated his note, at least according to the Moham-medan law of the present day; and so also did the fact that he specified no time of payment.

One is naturally led to inquire whether the word **دَيْن**, which was here used of the transaction with the impoverished youth (l. 24), had acquired the technical and limited usage that it now possesses, to signify the simple 'loan-obligation.' The Moslem law-books of the present time provide for two sorts of legal obligations to pay, the **دَيْن** and the

سَلَمَ وَسَلَفَ, treating them under the same category with contracts of sale. Thus the creditor is looked upon as buyer to the amount of the obligation, and the debtor as vender of the same, so that the Moslem manages to evade the Koranic prohibition of usury. Such legal squinting, it may be said, is characteristic of the Orientals, and has its parallels elsewhere in their institutions. Accordingly, in the second species of contract, the debtor promises to deliver goods or money to a stipulated amount over that actually borrowed, and the creditor contrives to get his interest. The **دَيْن**, however, which more concerns us here, is a promise to restore merely the amount lent, at the end of a specified term. In case the debtor fails to keep his agreement, the Hanfite and the unorthodox Shi'ite sects insist still further that the creditor may claim no interest; but the Shāfi'ites more rationally permit him to convert the contract immediately into the **سَلَمَ وَسَلَفَ**. Ordinarily, a written contract is made out, with the signatures of sev-

* Ar. **بِالْوَفَايَةِ** (= in *wāfi* kind). The *wāfi* was then equivalent to the silver **دِرْهَم**, about 20 cents. There would be no point to the end of this story if it were translated by 'in full.' Cf. 'Amru's request above. How improper to have asked Mo'awiya to pay in full!

eral witnesses, in whose presence the loan must be made. Yet the contract is valid if oral only, provided the creditor pronounces the word *أَفْرَضْتُ* 'I lend,' and the debtor *قَبِلْتُ* 'I receive.'

To return to our story of Sa'îd and the time of Moâwiya (7th cent. A.D.): we can say this much, that *دَيْن* was then used of a 'promise to pay,' though it connoted in fact much more than *عِدَّة* (cf. loc. cit.

lines 11, 16, 24); that one witness, at least, was required, though probably more, this being a peculiar case; that the custom of writing out

عِدَات was very common, especially when rich men had fees to pay;

finally that, as another tradition, adduced (loc. cit.) to show that Sa'îd was generous to a fault, also indicates, local if not inter-territorial systems of credit prevailed. Sa'îd ordered a freedman, it is said, to

"take what he liked on his security (*أَمَانَةً*)," in order to marry off one of his young servants.

But now let us pass from Moâwiya to Mohammed, half a century earlier. Have we proof that there existed in his time such financial facilities as are above suggested? Or is it correct to draw the usual picture of a system of barter, in which the precious metals had a value not as a circulating medium, but as natural products, for ornamental purposes? The testimony of the Koran (ii. 282-284) would tend to disestablish this latter view: "O ye who believe!" it reads, "if ye engage in debt for a stated time, then write it down, and let a scribe write it down between you faithfully; . . . unless, indeed, it be a ready-money transaction between you, which ye arrange between yourselves; . . . but bring witnesses to what ye sell one to another; . . . but if ye be upon a journey and ye cannot find a scribe, then let a pledge be taken."

It looks as if in Mohammed's time at Medina, where these words were said to have been uttered, and at Mekka, there was a class, not necessarily a school of men, who, knowing how to write, had fallen into the custom of recording transactions for their neighbors, and acted as scribes to the merchants passing in and out of the city. Mohammed thus favors their employment, as calculated to assure the systematic recording of business acts, and to prevent unfair dealing.

With this evidence we may compare that of the traditions of the *Ṣaḥiḥ* of Al-Bokhâri, in his chapter on "Borrowing, Payment of Debts, Cheating, and Failure" (ed. Krehl, ii. § 44). Here is reported Mohammed's behavior in matters of trade. The first two traditions represent him as paying his creditors promptly or else giving security (e. g., an iron cuirass for some food obtained from a Jew), while the fourth states that he was in the habit of keeping by him one *dīnâr*, no more, with which to meet any obligation. Somewhat discrepantly, we find here no use of scribe or witness, but only pledge-giving, which grew out of simple barter, or holding of ready money as a medium of

exchange. Probably Mohammed's own social and commercial relations expanded in proportion as he and his religion advanced into greater popularity.

On the other hand, we have good reason to believe that the advent of the Prophet gave one forcible turn to the commercial life as well as to the religious cult of the Arabs. In his day, the Bedâwîn flowing in from the desert to the cities were confounded, and too often thrown into great straits, by the class of men who swarmed the market-places and acted as money-changers. Fortunately, there are extant lines from old poets, a couple of them perhaps pre-Mohammedan, which depict this condition of things in the Arabian business world (see Nöldeke, *Beiträge zur Poesie der alten Araber*, pp. 183-193)*. Each fragment or piece of poetry expresses the great joy of a man who, in a very wily manner, has been able to foil his creditor. In all these lines

the word دَيْن has only the general sense of 'debt,' usually referring to a simple bill of sale. It is interesting to notice the word صَكِيْفَة, which was used in the story of Sa'id to signify the 'sheet of paper' on which the دَيْن was recorded. The Koranic prohibition of usury, however, is our best evidence of the fact that money-changing was a widespread practice in Mohammed's time, along with some sort of banking and account-keeping (ii. 276-279). The policy of that revelation was to protect the poorer classes of his converts against the fraudulent extortions of those quasi-brokers. With the new era, therefore, the purely financial side of trade fell into the hands of Jews and other foreigners alone, with whom it largely remains at the present time.

The last purpose of this inquiry is to ask whether the Arabs were borrowers of these financial arrangements, especially the use of document and witnesses. Until the sixth century, when some homage was paid to the kings of Hîra and Ghassan, and appeal was made to their jurisdiction, they had never seen political union; under tribe or clan rule there was no recognized authoritative opinion. Some exception to this must be taken from the fact that certain highly respected families, like the Koreish at Mekka, rose early to a controlling influence in the cities. But more and more, particularly in the sixth century, the Arabs came into living contact with Egypt, Syria, and Persia, whose inhabitants were well advanced in their organization of private as well as political rights and regulations. Through the Christians then settled in Arabia, and especially the Ghassanite Arabs in the north of the peninsula, the Bedâwîn were confronted with Greek civilization, and borrowed much of Byzantine culture as time went on. But, if in Mohammed's time such documents were used, it must have been through the influence of the caravan-trades to the north and east that

* For this reference I am indebted to Dr. C. C. Torrey, of Andover.

the usage was introduced, though even at that early period the Jews and Christians might have disseminated European habits of business from Alexandria and other important commercial centres. Nevertheless, it is equally probable that the Arabs, no less than the Babylonians, from whom we have all kinds of contract-tablets reaching far back into antiquity, were original in this particular; that they were early led to require written testimony to business transactions; and that their increasing commerce with the outside world developed in their best representatives the sense of justice; so that under Mohammed, who was himself a keen trader, they easily adopted a regular requirement of documentary evidence in the undertaking of business obligations.

16. A palm-leaf column from Ahnas; by Rev. W. C. Winslow, of Boston.

This column, now in the Boston Museum of Fine Arts, was one of six belonging to a vestibule of a temple that once stood at Ha-Khen-sensu, referred to in Assyrian texts as Hininsi, afterwards named Heracleopolis by the Greeks, and called by the natives at present Ahnas, sometimes Henassieh; it is referred to in Isaiah xxx. 4, as Hanes. Henassieh may be a corruption of Hanes, the *eh* being a common terminative. As to the age of the site, Brugsch (*Dictionnaire Géographique*, i. 604) quotes a text stating that here Ra, the second king of the initial divine dynasties, began his earthly reign. Dr. Naville, the explorer of the Egypt Exploration Fund, searched in vain for inscriptions of the IXth and Xth Dynasties, whose seat of government was here; but among his disclosures were the columns of a side entrance to a temple undoubtedly dedicated to Arsaphes, a form of Osiris, usually represented with a ram's head. For the large text on the basement declares: "The living Horus, the mighty Bull who loves Ma, the lord of praises like his father Pthah, King Rameses, erected this house to his father Hershefi (Arsaphes), the Lord of Two Lands." The great Harris Papyrus (British Museum) states that Rameses III. presented slaves to "the temple of Hershefi, the king of the Two Lands": the peculiar designation of the god thus occurring in both cases. The six shafts, 17 feet in height, were probably taken by Rameses II. from an edifice of Usertesen II. of the XIIth Dynasty, as the architraves bear the cartouches of that king; but they can be absolutely dated only from the reign of Rameses.

The royal inscriptions, clearly emblazed, run from the bending palm-leaf to the base, on this wise: Emblems of the shoot of a plant and a bee (wasp form), verbally *suten cheb*; the six-worded cartouche, *Ra user ma Sotep en Ra*; *si Ra*; the cartouche, *Ramessu mer Amon*; the symbol Crux ansata, or tau of the Nile; the plant and bee repeated; *Neb Tawi*; the six-worded cartouche repeated; *Si* (or *Se*) *Ra*; *Neb khau*; the smaller cartouche repeated; the symbol of life repeated; *Neb Tawi*; the larger cartouche repeated; *Neb Khau*; and the smaller cartouche. On the column's right, with the same or equivalent titles,

Rameses is offering to Horus (figures 2 feet 9 inches in height); on the left a replica of the right, and, on the rear, of the front. The column from Ahnas in the museum of the University of Pennsylvania is without its capital; the Boston shaft is unrivalled by any other monumental work in this country from Egypt for its peculiar grace and beauty.

17. Professor D. G. Lyon, of Harvard University, gave an account of a collection of Phœnician glass-ware recently acquired by the Harvard Semitic Museum. The objects are said to have been found in tombs in the vicinity of Tyre, and they are believed to belong to the period between Alexander and the beginning of our era. There are forty-eight specimens, consisting of vases, tea bottles, kohl holders, bowls, goblets, and pitchers. They are well preserved, and several of the specimens are of unusually fine workmanship.